					ST DEPARTMENT DIVISION O	OF NA					AMEN	FC IDED REPC	ORM 3	
		APP	LICATION	FOR P	ERMIT TO DRILI	L				1. WELL NAME and NUMBER GMBU H-35-8-17				
2. TYPE (	<b>OF WORK</b>	RILL NEW WELL (I	REENT	ER P&A	WELL DEEPE	EN WELL				3. FIELD OR WILDCAT MONUMENT BUTTE				
4. TYPE (	OF WELL	Oil	Well	Coalbed	Methane Well: NO					5. UNIT or COMMUI		TION AGR	EEMENT	NAME
6. NAME OF OPERATOR									7. OPERATOR PHO	NE	16-4825			
									9. OPERATOR E-MA	IL				
Rt 3 Box 3630 , Myton, UT, 84052  10. MINERAL LEASE NUMBER   11. MINERAL OWNERSHIP										12. SURFACE OWN		newfield.co	m	
(FEDERAL, INDIAN, OR STATE) UTU-40026  FEDERAL INDIAN STATE									0	FEDERAL 🗓 INI	DIAN 🛑	STATI		FEE 🔵
13. NAMI	E OF SURFACE	OWNER (if box :	12 = 'fee')							14. SURFACE OWNI	ER PHO	NE (if box	12 = 'fe	ee')
15. ADDI	RESS OF SURF	ACE OWNER (if b	ox 12 = 'fee	·')						16. SURFACE OWN	ER E-MA	AIL (if box	12 = 'f	ee')
		OR TRIBE NAME			L8. INTEND TO COM		LE PRODUCT	ON FROM	1	19. SLANT				
(if box 1	2 = 'INDIAN')				ATT-1		gling Application	on) NO (	<b>(</b>	VERTICAL DIR	RECTION	AL 📵	HORIZON	NTAL 🔵
20. LOC	ATION OF WE	LL		FOO'	TAGES	QT	r-QTR	SECT	ION	TOWNSHIP	R	ANGE	МЕ	RIDIAN
LOCATION	ON AT SURFAC	CE	20	)78 FNL	NL 2203 FEL		SWNE	35		8.0 S	1	7.0 E		S
Top of U	Top of Uppermost Producing Zone 1564 FNL		564 FNL	. 2411 FEL	9	SWNE	35		8.0 S	17.0 E			S	
At Total Depth 1115 FNL			. 2573 FEL	N	NWNE	IE 35		8.0 S	1	7.0 E		S		
21. COUNTY UINTAH  22. DISTANCE TO NEAREST LEASE LIN 1115								(Feet)		23. NUMBER OF AC		<b>DRILLING</b>	UNIT	
25. DISTANCE TO NEAREST WEL (Applied For Drilling or Complete 1184								AME POOL	-	26. PROPOSED DEP	<b>TH</b> : 6406	TVD: 64	06	
27. ELEVATION - GROUND LEVEL 28. BOND NUMBER							29. SOURCE OF DRILLING WATER /							
		5037				WYB0	WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 437478						LICABLE	
					Hole, Casing,				)	_				
String Surf	Hole Size	Casing Size 8.625	0 - 300	Weig 24.			Max Mud			Class G		Sacks 138	Yield 1.17	Weight 15.8
Prod	7.875	5.5	0 - 6406	15.			8.3		Prem	nium Lite High Stre	ngth	304	3.26	11.0
										50/50 Poz		363	1.24	14.3
					A	ТТАСН	IMENTS							
	VERIFY T	HE FOLLOWIN	G ARE ATT	ACHE	D IN ACCORDAN	ICE WI	ІТН ТНЕ ОТ	AH OIL	AND G	GAS CONSERVATI	ON GE	NERAL F	RULES	
<b>✓</b> w	ELL PLAT OR	MAP PREPARED E	BY LICENSED	SURV	EYOR OR ENGINEE	R	COMPLETE DRILLING PLAN							
AF	FIDAVIT OF S	TATUS OF SURFA	CE OWNER	AGREE	MENT (IF FEE SURF	ACE)	FORM	5. IF OPI	ERATOI	R IS OTHER THAN TI	HE LEAS	SE OWNER	₹	
DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)							TOPOGRAPHICAL MAP							
NAME Mandie Crozier TITLE Regulatory Tech						Tech	PHONE 435 646-4825							
SIGNAT	URE				<b>DATE</b> 06/01/2011				EMAI	L mcrozier@newfield.	com			
	мвек <b>assign</b> 04751629(				APPROVAL				B	10 yill				
									Pe	Permit Manager				

# NEWFIELD PRODUCTION COMPANY GMBU H-35-8-17 AT SURFACE: SW/NE SECTION 35, T8S, R17E UINTAH COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

 Uinta
 0' – 1570'

 Green River
 1570'

 Wasatch
 6280'

 Proposed TD
 6406'

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation (Oil) 1570' – 6280'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature

Hardness pH

Water Classification (State of Utah)

Dissolved Calcium (Ca) (mg/l)

Dissolved Iron (Fe) (ug/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l)

Dissolved Total Solids (TDS) (mg/l)

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: GMBU H-35-8-17

Size	Interval		Weight	Grade	Coupling	Design Factors			
Size	Тор	Bottom	vveigni	Grade	Coupling	Burst	Collapse	Tension	
Surface casing	0'	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"	U	300				17.53	14.35	33.89	
Prod casing	0'	0.4001	45.5	1.55	1.70	4,810	4,040	217,000	
5-1/2"		6,406'	15.5	J-55	LTC	2.36	1.98	2.19	

#### Assumptions:

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU H-35-8-17

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft³/sk)	
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17	
Surface casing	300	Class G W/ 2/6 CaCl	161	30 %	15.6	1.17	
Prod casing	4,406'	Prem Lite II w/ 10% gel + 3%	304	30%	11.0	2.26	
Lead	4,406	KCI	992	30%	11.0	3.26	
Prod casing	2 000'	50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24	
Tail	2,000'	KCI	451	30%	14.3	1.24	

<sup>\*</sup>Actual volume pumped will be 15% over the caliper log

- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to Exhibit C for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. <u>AUXILIARY SAFETY EQUIPMENT TO BE USED</u>:

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### 8. <u>TESTING, LOGGING AND CORING PROGRAMS</u>:

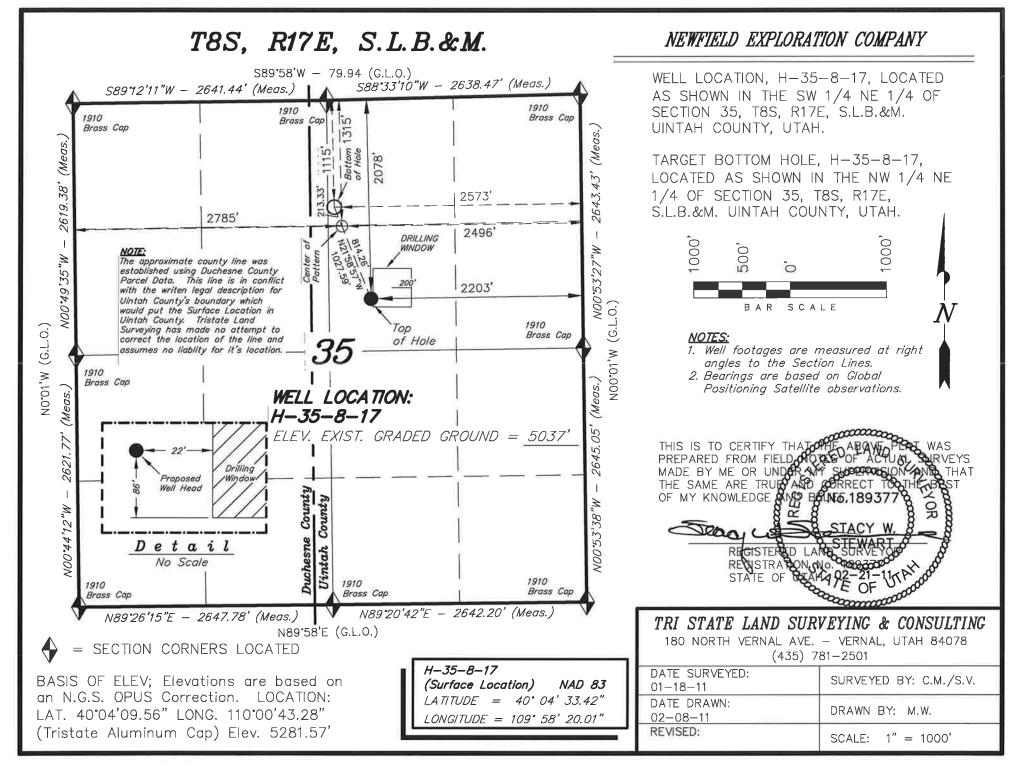
The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

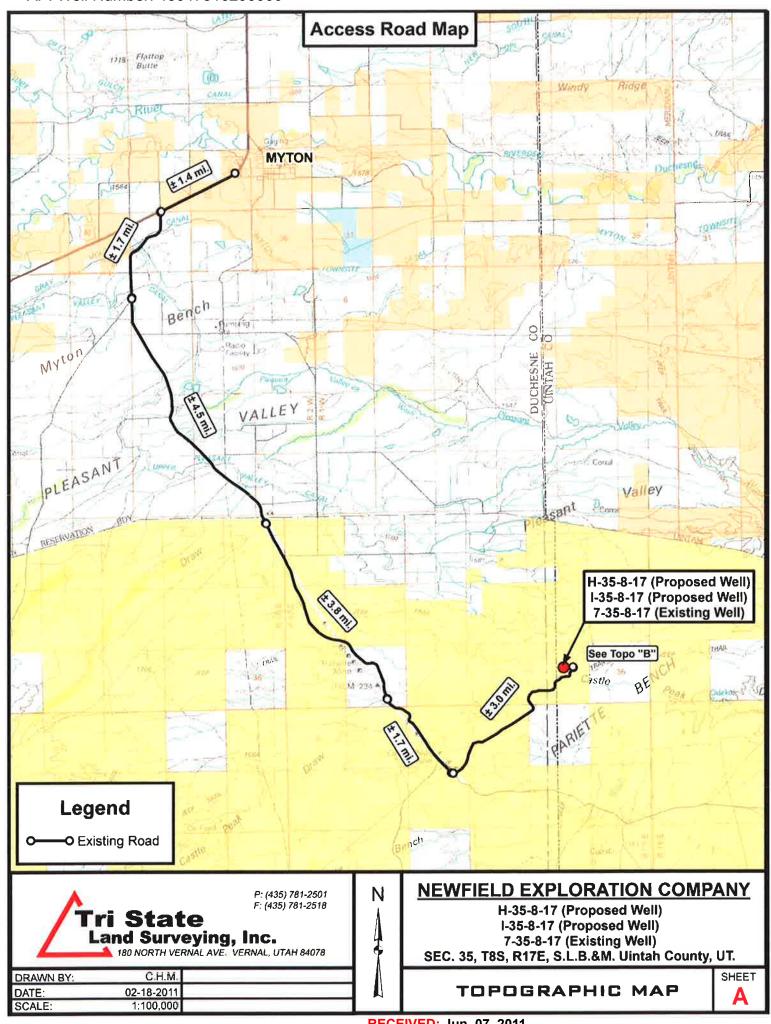
#### 9. ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:

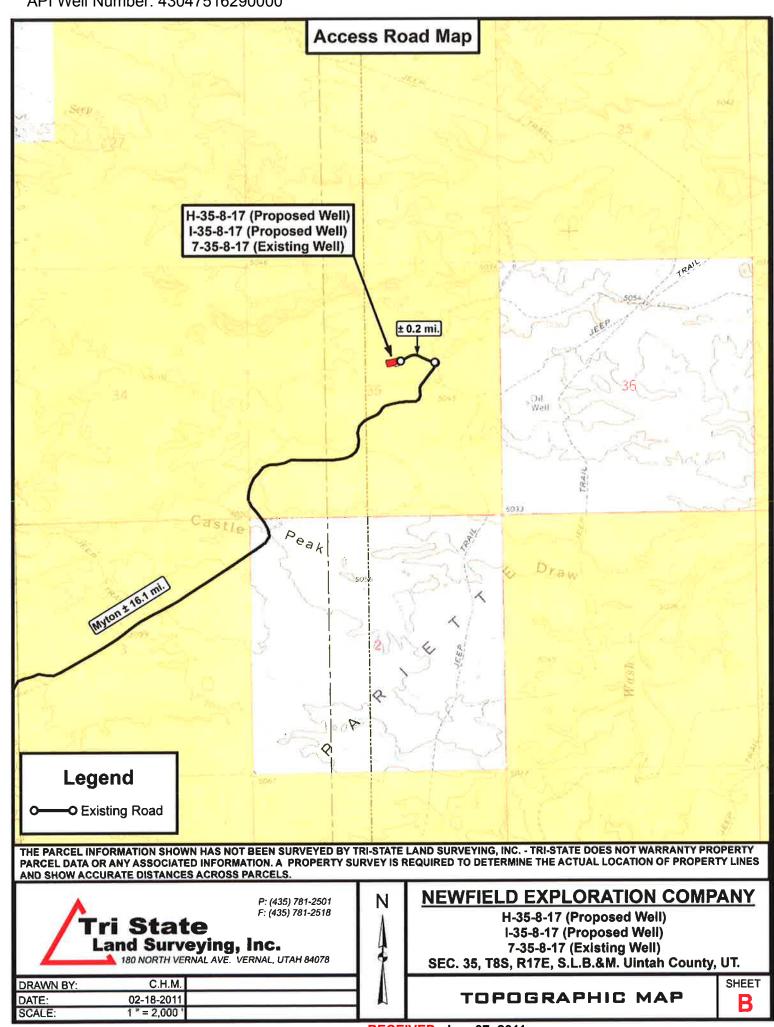
No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

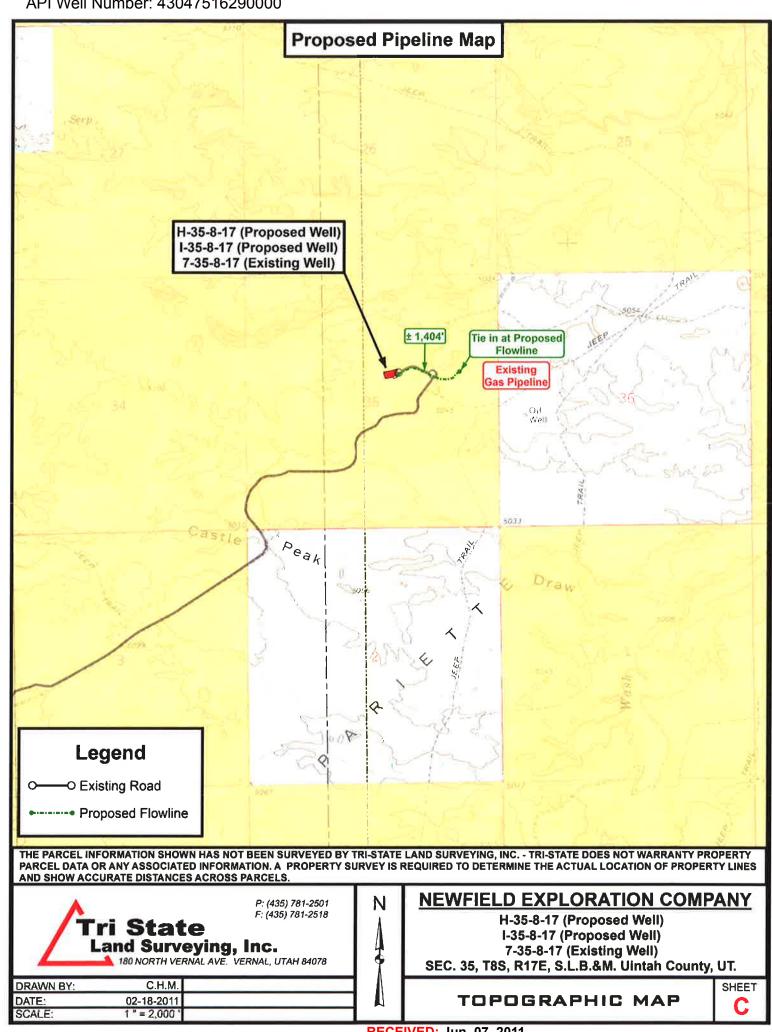
## 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

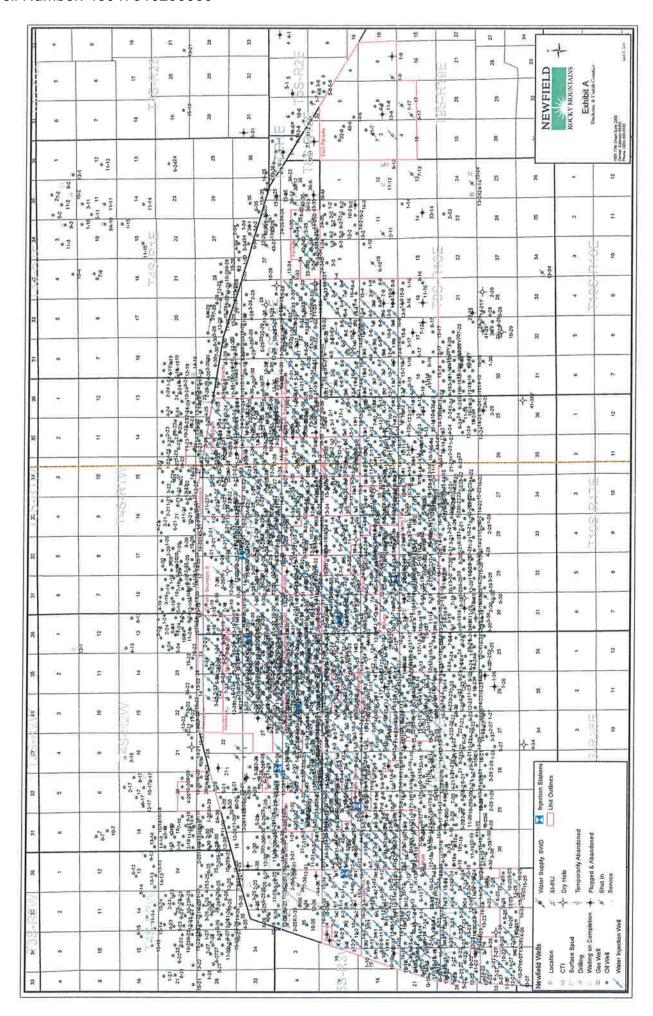
It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

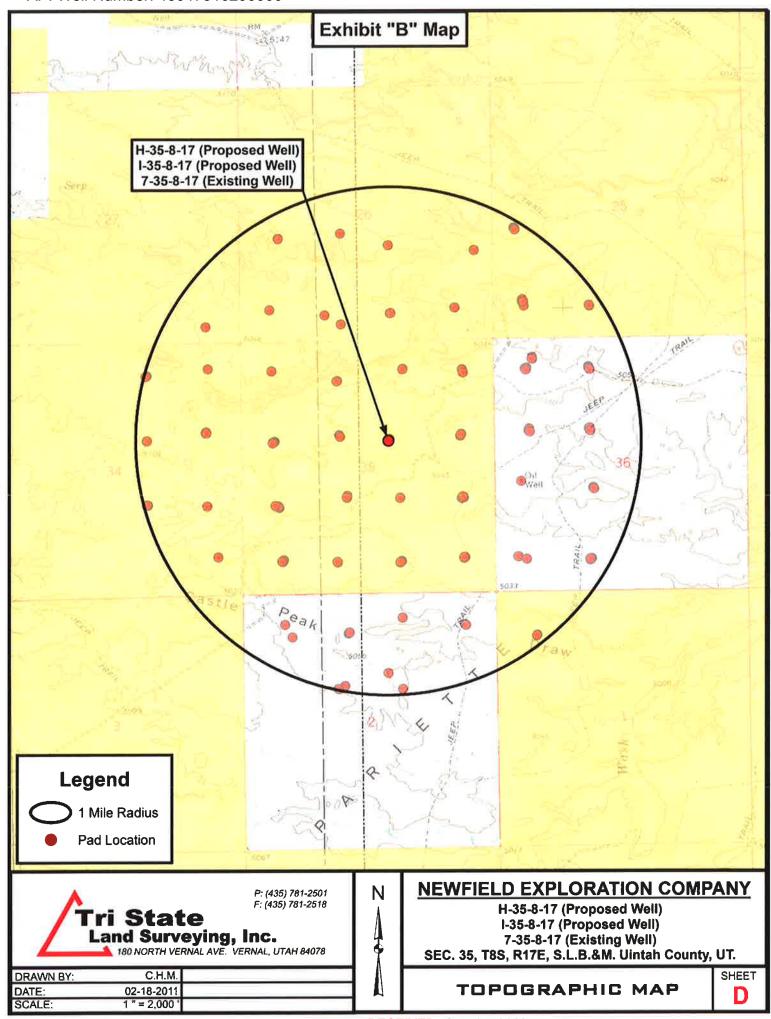














# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 35 T8, R17 H-35-8-17

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

03 February, 2011





#### PayZone Directional Services, LLC.

Planning Report



Database: Company: Project:

EDM 2003.21 Single User Db **NEWFIELD EXPLORATION** USGS Myton SW (UT)

**SECTION 35 T8, R17** 

Well: Wellbore: Design:

Site:

H-35-8-17 Wellbore #1 Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

**Survey Calculation Method:** 

Well H-35-8-17

H-35-8-17 @ 5049\_0ft (Newfield Rig) H-35-8-17 @ 5049.0ft (Newfield Rig)

Minimum Curvature

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983 North American Datum 1983

System Datum:

Mean Sea Level

Geo Datum: Map Zone:

Site Position:

**Well Position** 

Site

Well

Utah Central Zone

**SECTION 35 T8, R17** 

Northing:

H-35-8-17, SHL LAT: 40 04 33.42 LONG: -109 58 20.01

0.0 ft

7,200,039.79 ft

Latitude: Longitude:

40° 4' 33,420 N 109° 58' 20 010 W

From: Position Uncertainty: Lat/Long

Easting: Slot Radius: 2,067,907,84 ft

Grid Convergence:

0.98°

Latitude:

40° 4' 33.420 N

**Position Uncertainty** 

0.0 ft +E/-W 0.0 ft Northing: Easting:

7,200,039.79 ft 2,067,907.84 ft

Longitude:

109° 58' 20,010 W

0.0 ft

**IGRF2010** 

Wellhead Elevation:

5,049.0 ft

Ground Level:

5,037.0 ft

Wellbore

Wellbore #1

Magnetics

**Model Name** 

Sample Date

Declination (°) 11.33

**Dip Angle** (°)

Field Strength (nT)

52,340

Design

Design #1

**Audit Notes:** 

Version:

Phase:

2011/02/03

**PROTOTYPE** 

Tie On Depth:

0.0

65,85

Vertical Section:

Depth From (TVD) (ft) 5,200.0

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°) 338.02

Plan Sections										
Measured			Vertical			Dogleg	Build	Turn		
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Rate	Rate	Rate	TFO	
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	(°)	Target
0.0	0,00	0,00	0.0	0,0	0,0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,325.4	10.88	338.02	1,321.0	63.7	-25.7	1.50	1,50	0.00	338.02	
5,275.4	10.88	338.02	5,200.0	755.1	-304.8	0.00	0.00	0.00	0.00 H-	35-8-17 TGT
6,405.7	10.88	338.02	6,310.0	952.9	-384.6	0.00	0.00	0.00	0.00	



## PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: EDM 2003,21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

SECTION 35 T8, R17

Well: Wellbore:

Site:

H-35-8-17 Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well H-35-8-17

H-35-8-17 @ 5049.0ft (Newfield Rig) H-35-8-17 @ 5049.0ft (Newfield Rig)

Grid

Minimum Curvature

Vellbore: Design:	Wellbore #1 Design #1								
Planned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0,0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0_0	0.0	0.0	0,00	0.00	0.00
200,0	0.00	0,00	200.0	0.0	0,0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400,0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0,00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	338.02	700.0	1.2	-0.5	1.3	1.50	1.50	0.00
800.0	3.00	338.02	799.9	4.9	-2.0	5.2	1.50	1,50	0.00
900.0	4.50	338.02	899.7	10.9	-4.4	11.8	1.50	1,50	0.00
4.000.0		222.00							
1,000.0	6.00	338.02	999.3	19.4	-7.8	20.9	1.50	1.50	0.00
1,100.0	7.50	338.02	1,098.6	30.3	-12.2	32.7	1.50	1.50	0.00
1,200.0	9.00	338.02	1,197.5	43.6	-17.6	47.0	1.50	1.50	0.00
1,300.0	10,50	338.02	1,296.1	59.3	-23.9	64.0	1.50	1.50	0.00
1,325.4	10.88	338,02	1,321.0	63.7	-25,7	68.7	1,50	1.50	0.00
1,400.0	10.88	338.02	1,394.3	76.7	-31.0	82,8	0.00	0.00	0.00
1,500.0	10.88	338.02	1,492.5	94.2	-38.0	101.6	0.00	0.00	0.00
1,600.0	10,88	338.02	1,590.7	111.7	-45.1	120,5	0.00	0.00	0.00
1,700.0	10.88	338.02	1,688,9	129.3	-52.2	139.4	0.00	0.00	0.00
1,800.0	10.88	338.02	1,787.1	146.8	-59.2	158.3	0.00	0.00	0.00
1,900.0	10.88	338.02	1,885,3	164.3	-66.3	177.1	0.00	0.00	0.00
2,000.0	10.88	338.02	1,983.5	181.8	-73.4	196.0	0.00	0.00	0.00
2,100.0	10.88	338.02	2,081.7	199.3	-80.4	214.9	0.00	0.00	0.00
2,200.0	10.88	338.02	2,179.9	216.8	-87.5	233.8	0.00	0.00	0.00
2,300.0	10.88	338.02	2,278.1	234.3	-94.6	252.6	0.00	0.00	0.00
2,400.0	10.88	338,02	2,376.3	251.8	-101.6	271.5	0.00	0.00	0.00
2,500.0	10.88	338.02	2,474.5	269.3	-108.7	290.4	0.00	0.00	0.00
2,600.0	10.88	338.02	2,572.7	286.8	-115.8	309.3	0.00	0.00	0.00
2,700.0	10_88	338.02	2,670.9	304.3	-122.8	328.1	0.00	0.00	0.00
2,800.0	10.88	338.02	2,769.1	321.8	-129.9	347.0	0.00	0.00	0.00
2,900.0	10.88	338.02	2,867.3	339,3	-136.9	365.9	0.00	0.00	0.00
3,000.0	10.88	338.02	2,965.5	356.8	-144.0	384.8	0.00	0.00	0.00
3,100.0	10.88	338.02	3,063.7	374.3	-151.1	403.6	0.00	0.00	0.00
3,200.0	10.88	338.02	3,161.9	391.8	-158.1	422.5	0.00	0.00	0.00
3,300.0	10.88	338.02	3,260.2	409.3	-165.2	441.4	0.00	0.00	0.00
2.400.0	40.00	222.00			470.0	400.0		0.00	0.00
3,400.0	10.88	338.02	3,358.4	426.8	-172.3	460.3	0.00	0.00	0.00
3,500.0	10.88	338.02	3,456.6	444.3	-179.3	479.1	0.00	0.00	0.00
3,600.0	10.88	338.02	3,554.8	461.8	-186.4	498.0	0.00	0.00	0.00
3,700.0 3,800.0	10.88 10.88	338.02 338.02	3,653.0	479.3	-193.5 -200.5	516.9	0.00 0.00	0.00	0,00 0.00
3,000,0	10,00	330.02	3,751.2	496.8	-200.5	535.8	0.00	0.00	0.00
3,900.0	10.88	338.02	3,849.4	514.3	-207.6	554.6	0.00	0.00	0.00
4,000.0	10.88	338.02	3,947.6	531.8	-214.7	573.5	0.00	0.00	0.00
4,100.0	10.88	338.02	4,045.8	549.3	-221.7	592.4	0.00	0.00	0.00
4,200.0	10,88	338.02	4,144.0	566.8	-228.8	611.3	0.00	0.00	0.00
4,300.0	10,88	338,02	4,242.2	584.4	-235.9	630.2	0.00	0.00	0.00
4,400.0	10.88	338.02	4,340.4	601.9	-242.9	649.0	0.00	0.00	0.00
4,500.0	10.88	338.02	4,438.6	619.4	-250.0	667.9	0.00	0.00	0.00
4,600.0	10.88	338.02	4,536.8	636.9	-257.1	686.8	0.00	0.00	0.00
4,700.0	10.88	338.02	4,635.0	654.4	-264.1	705.7	0.00	0.00	0.00
4,800.0	10.88	338.02	4,733.2	671.9	-271.2	724.5	0.00	0.00	0.00
4,900.0	10.88	338.02	4,831.4	689.4	-278,2	743.4	0.00	0.00	0.00
5,000.0	10.88	338.02	4,929.6	706.9	-285.3	762.3	0.00	0.00	0.00
5,100.0	10.88	338.02	5,027.8	724.4	-292.4	781.2	0.00	0.00	0.00
5,200.0	10.88	338.02	5,126.0	741.9	-299.4	800.0	0.00	0.00	0.00



## PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

SECTION 35 T8, R17

Well: Wellbore: Design:

Site:

H-35-8-17 Wellbore #1 Design #1 Local Co-ordinate Reference:

TVD Reference: MD Reference:

North Reference: Survey Calculation Method: Well H-35-8-17

H-35-8-17 @ 5049.0ft (Newfield Rig) H-35-8-17 @ 5049.0ft (Newfield Rig)

Grid

Minimum Curvature

ned Survey									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,275.4	10,88	338,02	5,200.0	755.1	-304.8	814.3	0.00	0.00	0.00
H-35-8-17 TO	<b>ST</b>								
5,300.0	10.88	338,02	5,224.2	759,4	-306.5	818.9	0.00	0.00	0.00
5,400.0	10.88	338.02	5,322.4	776.9	-313.6	837.8	0.00	0.00	0.00
5,500.0	10.88	338.02	5,420.6	794.4	-320.6	856.7	0.00	0.00	0.00
5,600.0	10.88	338.02	5,518.8	811.9	-327.7	875.5	0.00	0.00	0.00
5,700.0	10.88	338.02	5,617.0	829,4	-334.8	894.4	0.00	0.00	0.00
5,800.0	10.88	338.02	5,715.2	846.9	-341:8	913.3	0.00	0.00	0.00
5,900.0	10.88	338.02	5,813.4	864.4	-348.9	932.2	0.00	0.00	0.00
6,000.0	10.88	338.02	5,911.6	881.9	-356.0	951.0	0.00	0.00	0.00
6,100.0	10,88	338.02	6,009.8	899.4	-363.0	969.9	0.00	0.00	0.00
6,200.0	10.88	338.02	6,108.0	916.9	-370.1	988.8	0.00	0.00	0.00
6,300.0	10.88	338,02	6,206.2	934.4	-377.2	1,007.7	0.00	0.00	0.00
6,405.7	10.88	338.02	6,310.0	952.9	-384.6	1,027.6	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
H-35-8-17 TGT - plan hits target - Circle (radius 75.0)	0.00	0,00	5,200.0	755 1	-304.8	7,200,794.86	2,067,603.08	40° 4′ 40.933 N	109° 58' 23,764 W



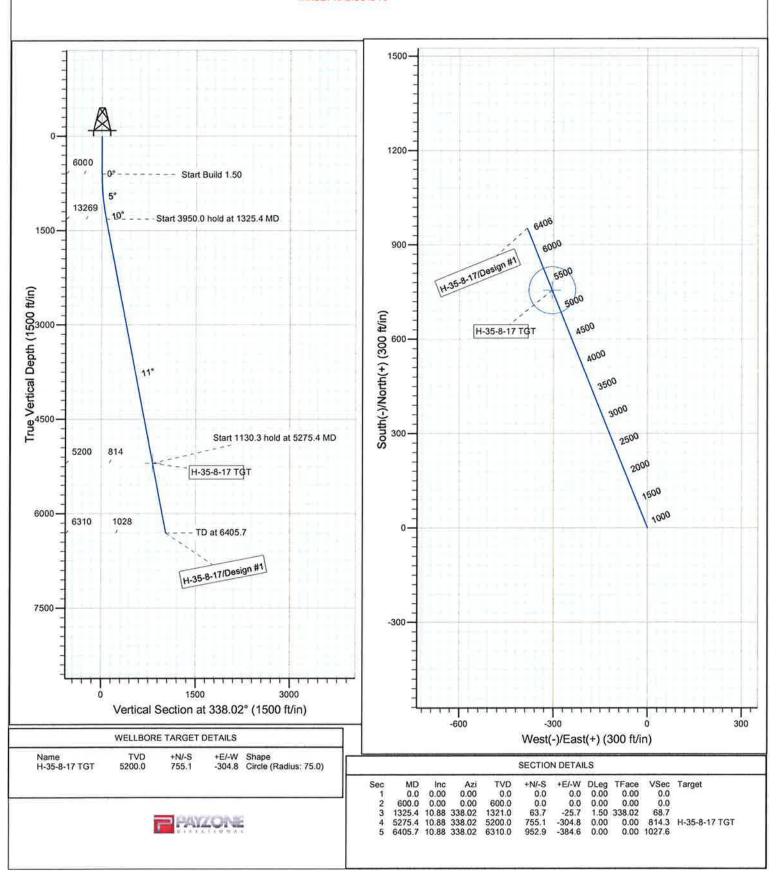
Project: USGS Myton SW (UT) Site: SECTION 35 T8, R17

Well: H-35-8-17 Wellbore: Wellbore #1 Design: Design #1 T G M

Azimuths to Grid North True North: -0.98° Magnetic North: 10.35°

Magnetic Field Strength: 52339.6snT Dip Angle: 65.85° Date: 2011/02/03 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



# NEWFIELD PRODUCTION COMPANY GMBU H-35-8-17 AT SURFACE: SW/NE SECTION 35, T8S, R17E UINTAH COUNTY, UTAH

#### ONSHORE ORDER NO. 1

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

## 1. <u>EXISTING ROADS</u>

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU H-35-8-17 located in the SW 1/4 NE 1/4 Section 35, T8S, R17E, Uintah County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed in a southeasterly direction - 11.7 miles to it's junction with an existing dirt road to the northeast; proceed in a northeasterly direction -3.0 miles to it's junction with an existing road to the west; proceed in a westerly direction -0.2 miles to it's junction with the beginning of the access road to the existing 7-35-8-17 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 7-35-8-17 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

## 3. <u>LOCATION OF EXISTING WELLS</u>

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. SOURCE OF CONSTRUCTION MATERIALS

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

#### 8. <u>ANCILLARY FACILITIES</u>

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

## b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. State of Utah Antiquities Project Permit #U-11-MQ-0322b,p 5/25/11, prepared by

Montgomery Archaeological Consultants. Paleontological Resource Survey prepared by, Wade E. Miller, 7/28/03. See attached report cover pages, Exhibit "D".

#### **Surface Flow Line**

Newfield requests 1,404' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "C"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

<u>Clearing and Grading</u>: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

<u>Installation</u>: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

<u>Termination and Final Reclamation:</u> After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed GMBU H-35-8-17 was on-sited on 4/26/11. The following were present; Tim Eaton (Newfield Production) and Janna Simonsen (Bureau of Land Management).

#### **Hazardous Material Declaration**

Newfield Production Company guarantees that during the drilling and completion of the GMBU H-35-8-17, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU H-35-8-17, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

#### 13. **LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:**

Representative

Name: Tim Eaton

Address: Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (435) 646-3721

#### Certification

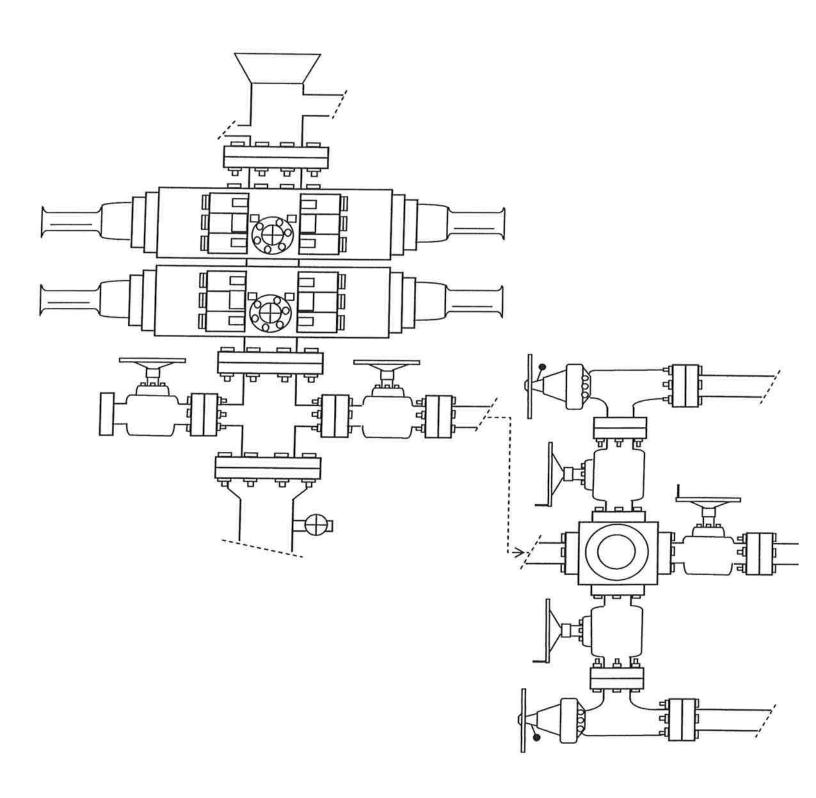
Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #H-35-8-17, Section 35, Township 8S, Range 17E: Lease UTU-40026 Uintah County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

I hereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

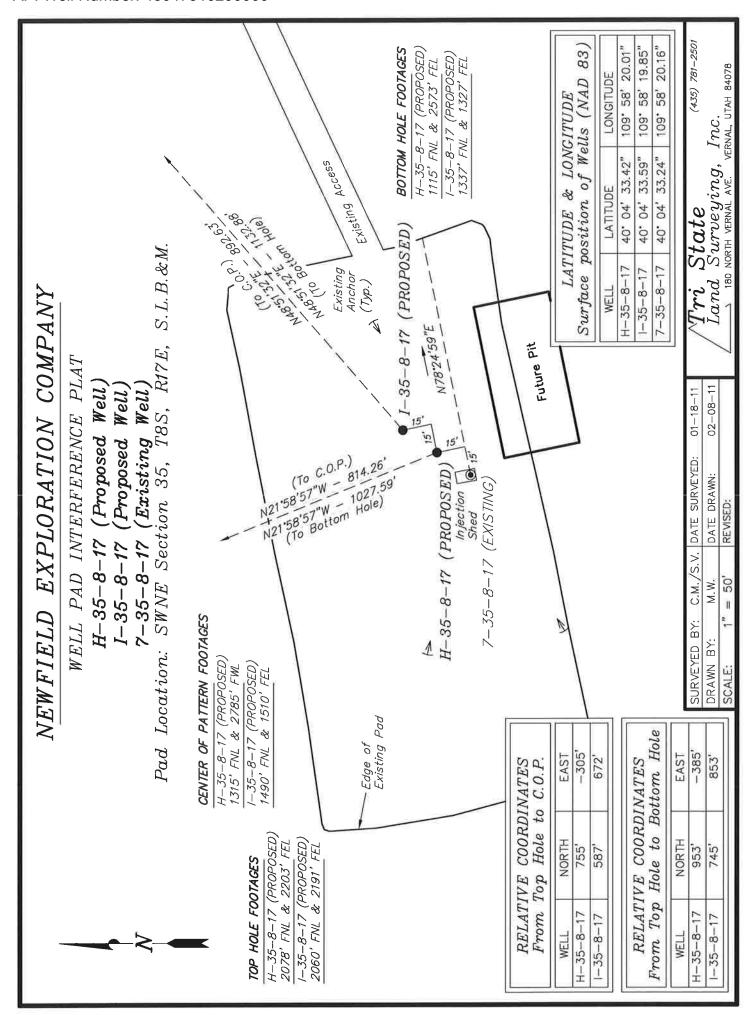
5/20/11	
Date	Mandie Crozier
	Regulatory Specialist
	Newfield Production Company

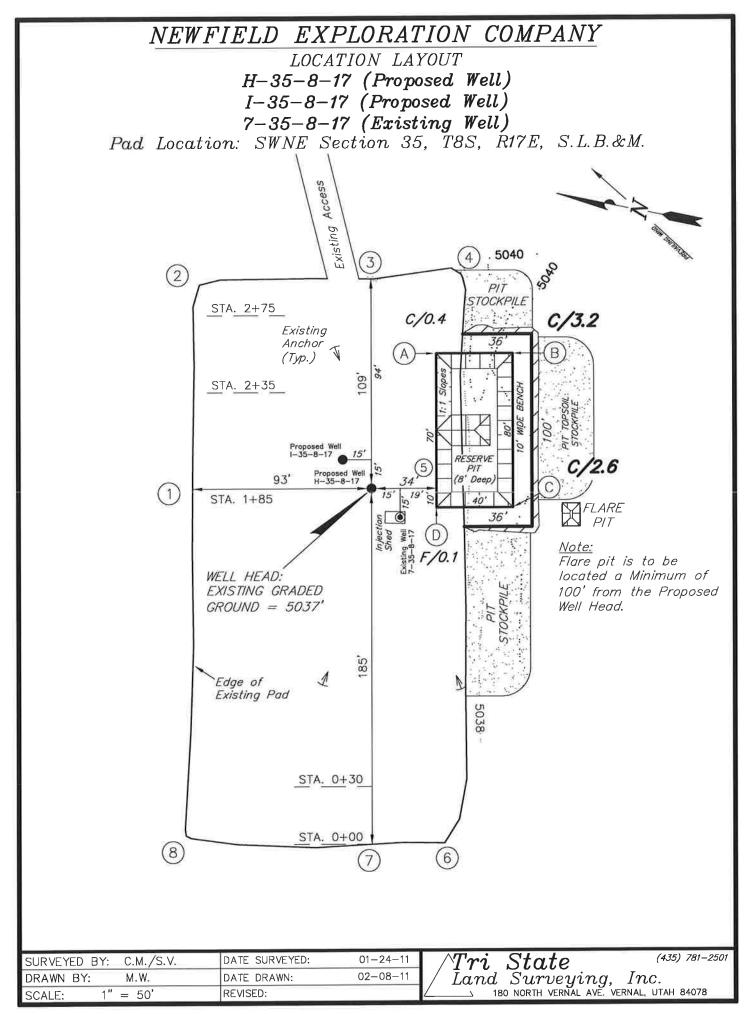
2-M SYSTEM

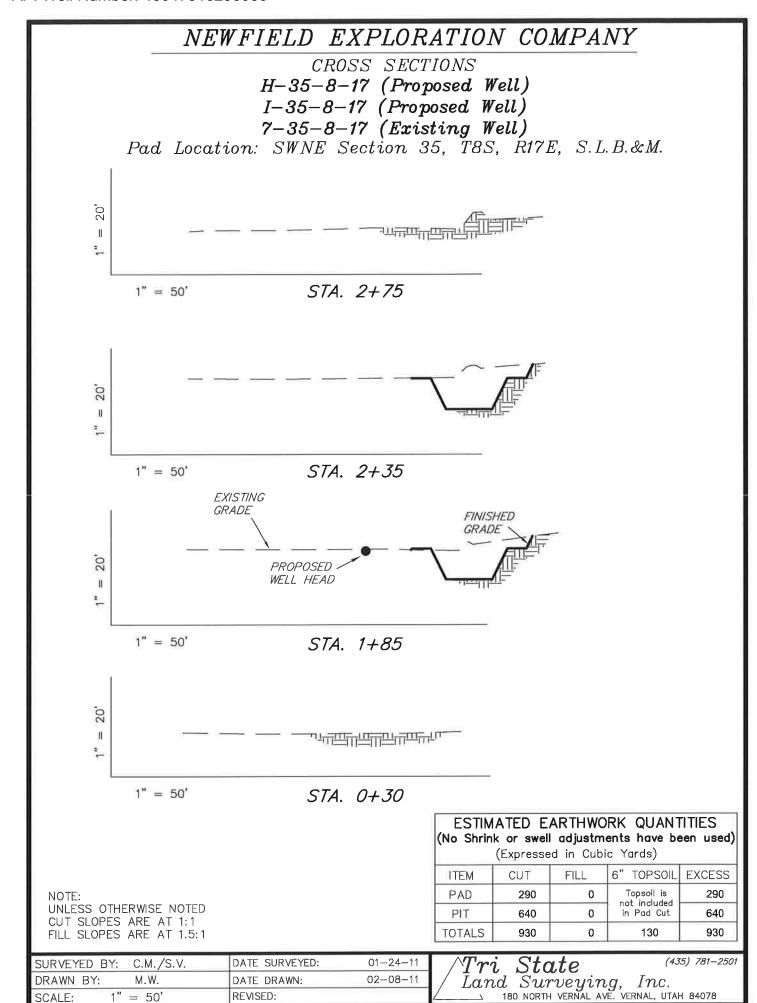
**Blowout Prevention Equipment Systems** 

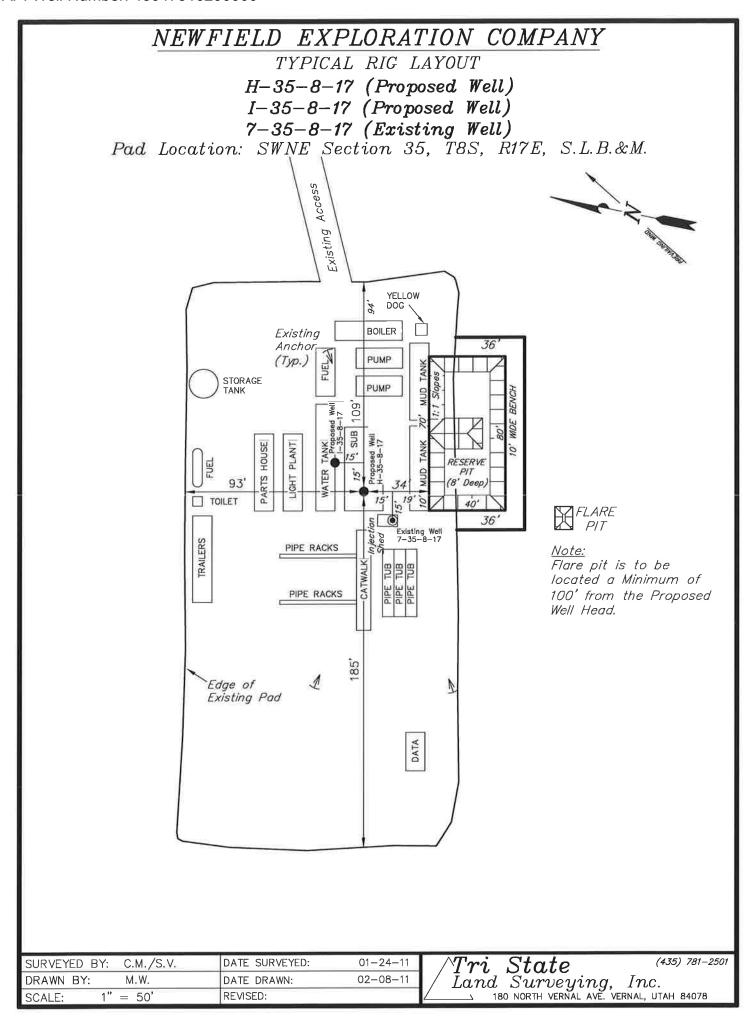


**EXHIBIT C** 



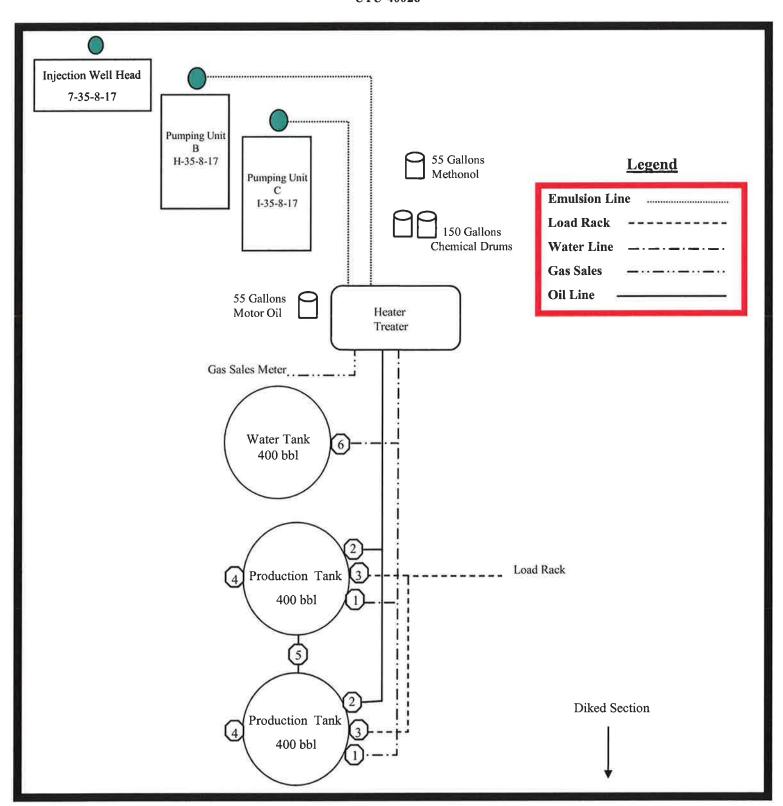






# **Newfield Production Company Proposed Site Facility Diagram**

GMBU H-35-8-17 From the 7-35-8-17 Location SW/NE Sec. 35, T8S, R17E Uintah County, Utah UTU-40026



## **United States Department of the Interior**

## **BUREAU OF LAND MANAGEMENT**

Utah State Office P.O. Box 45155 Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

June 3, 2011

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following wells are planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50787 GMBU K-16-9-17 Sec 16 T09S R17E 1964 FSL 0665 FEL BHL Sec 16 T09S R17E 2630 FSL 0100 FEL 43-013-50788 GMBU H-16-9-17 Sec 16 T09S R17E 1979 FNL 1951 FEL BHL Sec 16 T09S R17E 0993 FNL 2566 FWL 43-013-50789 GMBU S-32-8-16 Sec 32 T08S R16E 1944 FSL 0558 FEL BHL Sec 32 T08S R16E 1162 FSL 1486 FEL 43-013-50790 GMBU I-16-9-17 Sec 16 T09S R17E 1964 FNL 1935 FEL BHL Sec 16 T09S R17E 1162 FNL 1018 FEL 43-013-50791 GMBU L-16-9-17 Sec 16 T09S R17E 1853 FSL 1836 FEL BHL Sec 16 T09S R17E 2577 FNL 1072 FEL 43-013-50792 GMBU R-16-9-17 Sec 16 T09S R17E 0587 FSL 1961 FEL BHL Sec 16 T09S R17E 1460 FSL 2465 FWL 43-013-50793 GMBU S-16-9-17 Sec 16 T09S R17E 1943 FSL 0669 FEL BHL Sec 16 T09S R17E 1007 FSL 1564 FEL 43-013-50794 GMBU M-16-9-17 Sec 16 T09S R17E 1838 FSL 1850 FEL

**RECEIVED:** Jun. 07, 2011

BHL Sec 16 T09S R17E 2444 FNL 2491 FWL

WELL NAME

API#

Page 2

(Proposed PZ GREEN RIVE	(*)	
43-047-51629 GMBU H-35-	3-17 Sec 35 T08S R17E 2078 FNL 2203 FEL BHL Sec 35 T08S R17E 1115 FNL 2573 FEL	
43-047-51630 GMBU I-35-	8-17 Sec 35 T08S R17E 2060 FNL 2191 FEL BHL Sec 35 T08S R17E 1337 FNL 1327 FEL	
43-047-51631 GMBU L-35-	3-17 Sec 35 T08S R17E 2029 FNL 0710 FEL BHL Sec 35 T08S R17E 2445 FSL 1604 FEL	
43-047-51632 GMBU 0-36-	3-17 Sec 35 T08S R17E 2011 FNL 0700 FEL BHL Sec 36 T08S R17E 2422 FSL 0259 FWL	
43-047-51633 GMBU R-35-	3-17 Sec 35 T08S R17E 2008 FSL 2193 FWL BHL Sec 35 T08S R17E 0942 FSL 2467 FEL	
43-013-50798 GMBU Q-22-	8-17 Sec 22 T08S R17E 0565 FSL 0820 FWL BHL Sec 22 T08S R17E 1203 FSL 1693 FWL	
43-047-51634 GMBU P-25-	8-17 Sec 25 T08S R17E 0735 FSL 0615 FWL BHL Sec 25 T08S R17E 1398 FSL 0009 FWL	
43-047-51635 GMBU Q-25-	8-17 Sec 25 T08S R17E 0755 FSL 0620 FWL BHL Sec 25 T08S R17E 1475 FSL 1559 FWL	
43-047-51636 GMBU M-35-	8-17 Sec 35 T08S R17E 2029 FSL 2197 FWL BHL Sec 35 T08S R17E 2600 FNL 2502 FEL	
43-013-50799 GMBU D-3-9	-17 Sec 34 T08S R17E 0466 FSL 0424 FWL BHL Sec 03 T09S R17E 0151 FNL 1599 FWL	
43-013-50800 GMBU A-4-9	-17 Sec 34 T08S R17E 0459 FSL 0404 FWL BHL Sec 04 T09S R17E 0030 FNL 0040 FEL	
This office has no time.	bjection to permitting the wells at the	his

LOCATION

# Michael L. Coulthard Digitally signed by Michael L Coulthard Div:cn=Michael L Coulthard, c=Bureau of Land Management, ou=Branch of Minerals, email=Michael, Coulthard@blm.gov, c=US Date:2011.06.03 082454-0600'

bcc: File - Greater Monument Butte Unit
 Division of Oil Gas and Mining
 Central Files
 Agr. Sec. Chron

Agr. Sec. Chron Fluid Chron

MCoulthard:mc:6-3-11



#### VIA ELECTRONIC DELIVERY

June 2, 2011

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE: Directional Drilling

GMBU H-35-8-17

Greater Monument Butte (Green River) Unit

Surface Hole: T8S-R17E Section 35: SWNE (UTU-40026)

2078' FNL 2203' FEL

At Target: T8S-R17E Section 35: NWNE (UTU-40026)

1115' FNL 2573' FEL

Uintah County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 5/20/2011, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit.

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

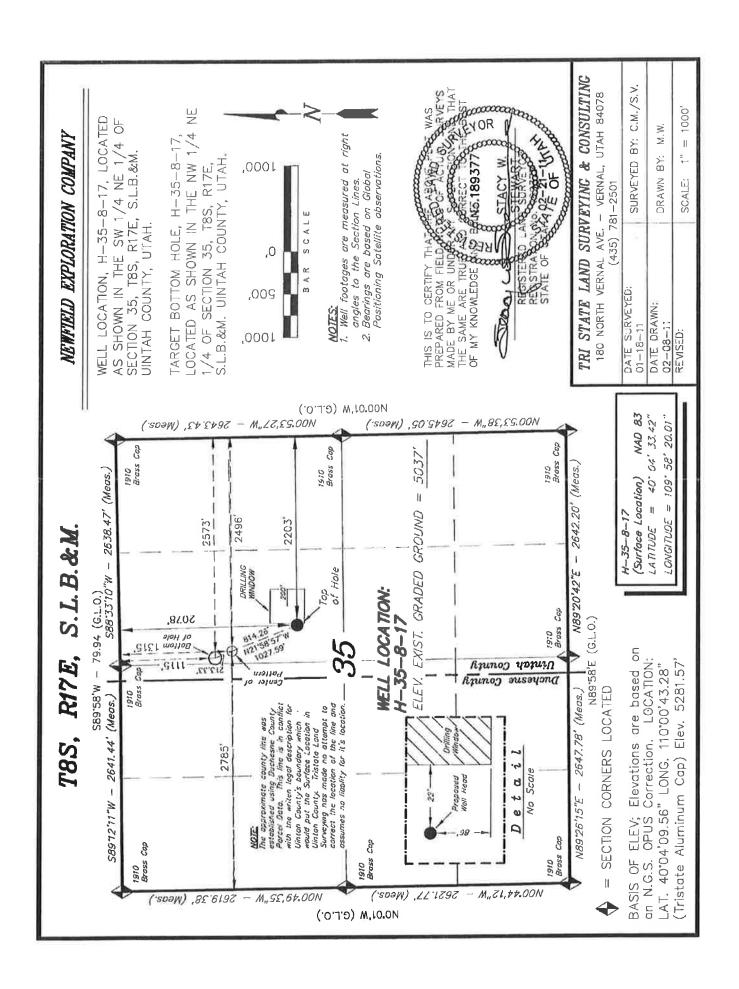
NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4153 or by email at <a href="mailto:pburns@newfield.com">pburns@newfield.com</a>. Your consideration in this matter is greatly appreciated.

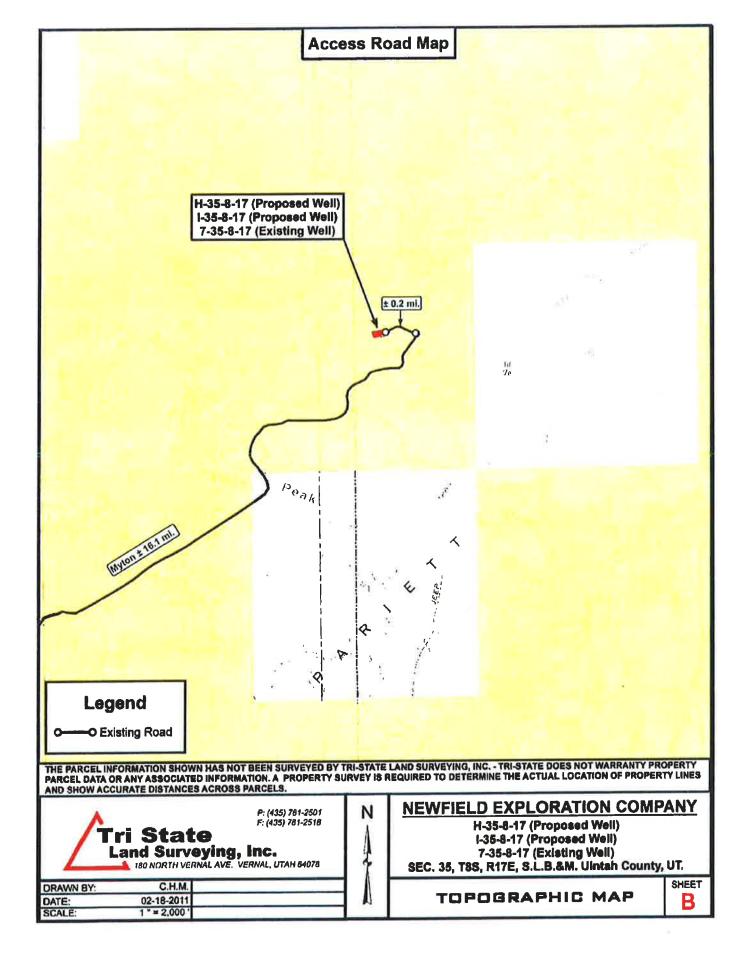
Sincerely,

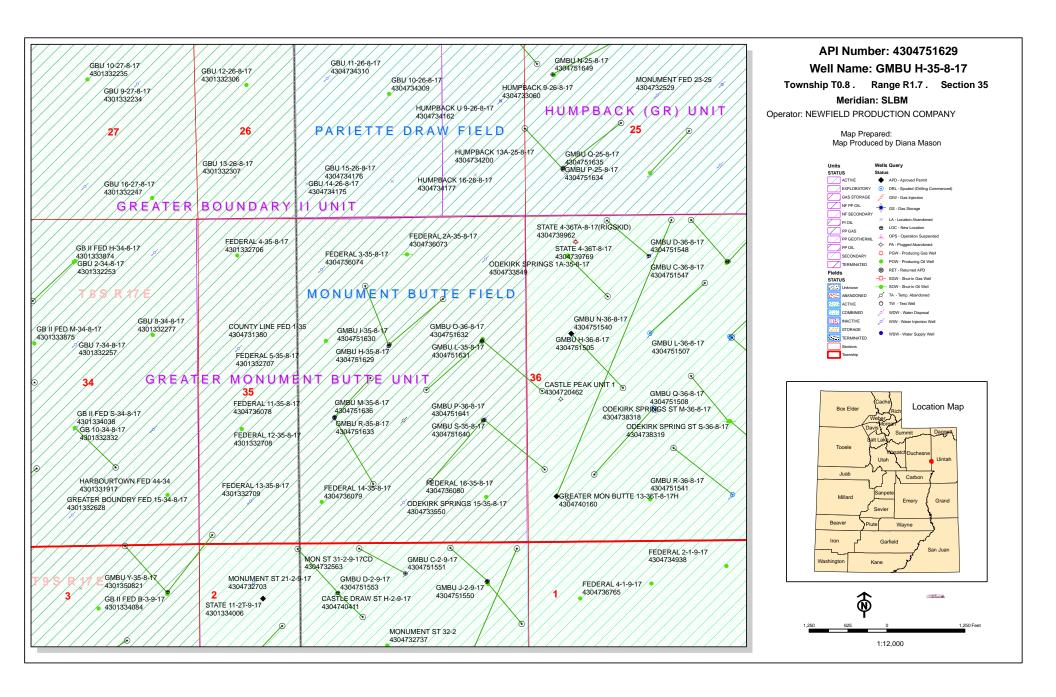
Newfield Production Company

Peter Burns Land Associate

Form 3160 - 3 (August 2007)		FORM APPROVED OMB No 1004-0137 Expires July 31, 2010							
UNITED STATE DEPARTMENT OF THE BUREAU OF LAND MAI	INTERIOR			5. Lease Serial No. UTU-40026		510			
APPLICATION FOR PERMIT TO				6. If Indian, Allotee or Tribe Name NA					
la. Type of work:  DRILL  REENT	ľER			7 If Unit or CA Agreement, Name and No. Greater Monument Butte					
Ib. Type of Well: Oil Well Gas Well Ollier	<b>√</b> Si	ngle Zone Mult	ple Zone	8. Lease Name and GMBU H-35-8					
2. Name of Operator Newfield Production Company				9. API Well No.					
3a. Address Route #3 Box 3630, Myton UT 84052		10. Field and Pool, or Monument Bu	-	ory					
1. Location of Well (Report location clearly and in accordance with a	ny State requiren	nents.*)		11. Sec., T. R. M. or	Blk.and S	urvey or Area			
At surface SW/NE 2078' FNL 2203' FEL Sec. 35, T8S	R17E (UT	U-40026)		Sec. 35, T8S	R17E				
At proposed prod. zone NW/NE 1115' FNL 2573' FEL Sec									
14 Distance in miles and direction from nearest town or post office* Approximately 16.3 miles southeast of Myton, UT				12 County or Parish Uintah		UT			
<ol> <li>Distance from proposed* location to nearest property or lease line, it. (Also to nearest drig, unit line, if any)</li> </ol>	Approx. 1,115' f/lse, NA f/unit 640.00				cing Unit dedicated to this well				
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1,184*	The state of the s			BIA Bond No. on file VYB000493					
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 5037' GL						Estimated duration     (7) days from SPUD to rig release			
	24. Attac	hments							
The following, completed in accordance with the requirements of Onsho	re Oil and Gas	Order No. I, must be a	ltached to th	is form:					
Well plat certified by a registered surveyor.     A Drilling Plan.     A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).	Lands, the	Item 20 above). 5. Operator certific	ation	ns unless covered by an ormation and/or plans a	·				
25 Signature James Lace		Printed Typed) a Crozlar			Date	(20/1			
Title Regulatory Specialist					-				
Approved by (Signature)	Name	(Printed Typed)			Date				
Tille	Office								
Application approval does not warrant or certify that the applicant holds conduct operations thereon. Conditions of approval, if any, are attached.	s legalorequita	able title to those right	s in the sub	ject lease which would o	entitle the	applicantto			
Fitle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a cr States any false, fictitious or fraudulent statements or representations as t	ime for any per lo any matter wi	rson knowingly and w	illfully to m	ake to any department of	or agency	of the United			
(Continued on page 2)				*(Inst	ruction	s on page 2)			







## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 6/1/2011 **API NO. ASSIGNED:** 43047516290000

WELL NAME: GMBU H-35-8-17

**PHONE NUMBER:** 435 646-4825 **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: SWNE 35 080S 170E **Permit Tech Review:** 

> SURFACE: 2078 FNL 2203 FEL **Engineering Review:**

> **BOTTOM:** 1115 FNL 2573 FEL Geology Review:

**COUNTY: UINTAH** 

**LATITUDE: 40.07597 LONGITUDE:** -109.97155 **UTM SURF EASTINGS: 587694.00 NORTHINGS:** 4436485.00

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

**LEASE NUMBER: UTU-40026** PROPOSED PRODUCING FORMATION(S): GREEN RIVER SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:** 

 PLAT R649-2-3.

Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493

**Potash** R649-3-2. General

Oil Shale 190-5

Oil Shale 190-3 R649-3-3. Exception

Oil Shale 190-13 **Drilling Unit** 

Board Cause No: Cause 213-11 Water Permit: 437478

**Effective Date:** 11/30/2009 **RDCC Review:** 

Siting: Suspends General Siting **Fee Surface Agreement** 

**Intent to Commingle** ■ R649-3-11. Directional Drill

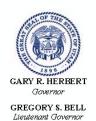
**Commingling Approved** 

**Comments:** Presite Completed

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason 27 - Other - bhill

API Well No: 43047516290000



## State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## Permit To Drill

\*\*\*\*\*\*

Well Name: GMBU H-35-8-17
API Well Number: 43047516290000
Lease Number: UTU-40026

Surface Owner: FEDERAL Approval Date: 6/7/2011

#### **Issued to:**

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at http://oilgas.ogm.utah.gov

API Well No: 43047516290000

### **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas

# RECEIVED

Form 3160-3 (August 2007)

JUN 0 1 2011

UNITED STATES JUN
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

5. Lease Serial No.

BUREAU OF LAND MAN	JAGEMENT	UTU-40026	3
APPLICATION FOR PERMIT		ah 6. If Indian, Allo	otee or Tribe Name
la. Type of work:  DRILL  REENT	4	Agreement, Name and No. nument Butte	
1b. Type of Well: Oil Well Gas Well Other	✓ Single Zone Multi	8. Lease Name a GMBU H-35	
Name of Operator Newfield Production Company		9. API Well No. 43-047	51629
3a. Address Route #3 Box 3630, Myton UT 84052	10. Field and Pool Monument E	• •	
4. Location of Well (Report location clearly and in accordance with an At surface SW/NE 2078' FNL 2203' FEL Sec. 35, T8S	R17E (UTU-40026)	11. Sec., T. R. M. G Sec. 35, T8	or Blk.and Survey or Area S R17E
At proposed prod. zone NW/NE 1115' FNL 2573' FEL Sec	. 35, 18S R1/E (U1U-40026)	12. County or Pari	sh 13. State
14. Distance in miles and direction from nearest town or post office* Approximately 16.3 miles southeast of Myton, UT		Uintah	UT
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any)	16. No. of acres in lease 640.00	17. Spacing Unit dedicated to to 20 Acres	his well
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 1,184'	19. Proposed Depth 6,406'	20. BLM/BIA Bond No. on file WYB000493	
1. Elevations (Show whether DF, KDB, RT, GL, etc.) 5037' GL	22. Approximate date work will star 3rd Qrdr. 20	· . (	ation SPUD to rig release
	24. Attachments		
he following, completed in accordance with the requirements of Onshor	re Oil and Gas Order No.1, must be at	tached to this form:	
<ul> <li>Well plat certified by a registered surveyor.</li> <li>A Drilling Plan.</li> <li>A Surface Use Plan (if the location is on National Forest System SUPO must be filed with the appropriate Forest Service Office).</li> </ul>	Item 20 above).  Lands, the 5. Operator certific	ne operations unless covered by ation specific information and/or plan	
5. Signature	Name (Printed/Typed) Mandie Crozier		Date Date
itle  Regulatory Specialist	Wantie Orozio		J00/11
pproved by (Signature)	Name (Printed Jerry	(enczka	Date JAN 0 4 20
Assistant Field Manager Lands & Mineral Resources	Office VERNA	L FIELD OFFICE	
pplication approval does not warrant or certify that the applicant hold induct operations thereon. onditions of approval, if any, are attached.		s in the subject lease which wou PPROVAL ATTACHE	
tle 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crates any false, fictitious or fraudulent statements or representations as t	ime for any person knowingly and wo any matter within its jurisdiction	illfully to make to any departmen	nt or agency of the United
(Continued on page 2)		1 0 2012 *(Ir	structions on page 2)

INCLUDIV. OF OIL, GARAGE

44-11-posted

5 4-4-2011

AFMSS# 115x50591A



# UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT **VERNAL FIELD OFFICE** 170 South 500 East

**VERNAL, UT 84078** 

(435) 781-4400



### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:

**Newfield Production Company** 

Well No: API No:

GMBU H-35-8-17 43-047-51629

Location: Lease No: SWNE, Sec. 35, T8S, R17E

UTU-40026

Agreement: **Greater Monument Butte** 

**OFFICE NUMBER:** 

(435) 781-4400

**OFFICE FAX NUMBER:** 

(435) 781-3420

# A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

# NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	_	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)	-	Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to:  blm_ut_vn_opreport@blm.gov
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 6 Well: GMBU H-35-8-17 12/20/2011

# SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop work and contact the Authorized Officer (AO). A determination will be made by the AO as to what mitigation may be necessary for the discovered paleontologic material before construction can continue.
- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.
- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with longterm successful revegetation.

#### Reclamation

- Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.
- The reclamation seed mix will incorporate low growing grasses, instead of crested wheatgrass, which negatively impacts mountain plover habitat.
- Appropriate erosion control and revegetation measures will be employed. In areas with unstable soils where seeding alone may not adequately control erosion, grading will be used to minimize slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored by Newfield and, if necessary, modifications will be made to control erosion.

#### Monitoring and Reporting

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that
  designates the proposed site-specific monitoring and reference sites chosen for the location. A
  description of the proposed sites shall be included, as well as a map showing the locations of the
  proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3
  growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed
  areas in order to determine whether the BLM standards set forth in the Green River District
  Reclamation Guidelines have been met (30% or greater basal cover).

Page 3 of 6 Well: GMBU H-35-8-17 12/20/2011

### DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

# SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

Page 4 of 6 Well: GMBU H-35-8-17 12/20/2011

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM,
   Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the <u>top of cement</u> and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to BLM\_UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 5 of 6 Well: GMBU H-35-8-17 12/20/2011

#### **OPERATING REQUIREMENT REMINDERS:**

 All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.

- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at <a href="https://www.ONRR.gov">www.ONRR.gov</a>.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - o The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be
  reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported
  verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will
  be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of
  Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs,

Page 6 of 6 Well: GMBU H-35-8-17 12/20/2011

core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid, and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

# BLM - Vernal Field Office - Notification Form

Operator Newfield Exploration Rig Name/# 29 Submitted By Mike Braithwaite Phone Number 435-401-8392 Well Name/Number GMBU H-35-8-17 Qtr/Qtr SW/NE Section 35 Township 8S Range 17E Lease Serial Number UTU-40026 API Number 43-047-516 29 Spud Notice – Spud is the initial spudding of the well, not drilling
out below a casing string.
Date/Time <u>12/27/2012</u> <u>9:00</u> AM ∑ PM ☐
<ul> <li>Casing – Please report time casing run starts, not cementing times.</li> <li>Surface Casing</li> <li>Intermediate Casing</li> <li>Production Casing</li> <li>Liner</li> <li>Other</li> </ul>
Date/Time <u>12/27/2012</u> 3:00 AM PM
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other  Date/Time AM PM
Remarks

FORM 3160-5
(August 2007)

#### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB No. 1004-0137 Expires: July 31,2010

Lease Serial No.

SUNDRY N	OTICES AND RE	PORTS ON W	/ELLS
Do not use this	form for proposal	s to drill or to r	e-enter an
abandoned well.	Use Form 3160-3	(APD) for such	proposals

6. If Indian, Allottee or Tribe Name.

USA UTU-40026

		() ioi caon proposato.	<b>.</b>	
SUBMIT IN	TRIPLICATE - Oth	er Instructions on page 2	i i	Agreement, Name and/or
1. Type of Well Oil Well Gas Well 2. Name of Operator NEWFIELD PRODUCTION CO	Other		8. Well Name and GMBU H-35-8-	
3a. Address Route 3 Box 3630 Myton, UT 84052	Sec., T., R., M., or Survey De	3b. Phone (include are cod 435.646.3721 scription)	7 4304731029	
12. CHECK	C APPROPRIATE BOX	X(ES) TO INIDICATE NATU		THER DATA
TYPE OF SUBMISSION		TYPE O	F ACTION	
Notice of Intent  Subsequent Report  Final Abandonment	Acidize Alter Casing Casing Repair Change Plans Convert to Injector	Deepen Fracture Treat New Construction Plug & Abandon Plug Back	Production (Start/Resume) Reclamation Recomplete Temporarily Abandon Water Disposal	Water Shut-Off Well Integrity Other Spud Notice

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final increasion. inspection.)

On 1/27/12 MIRU Ross #29. Spud well @9:00 AM. Drill 340' of 12 1/4" hole with air mist. TIH W/ 8 Jt's 8 5/8" J-55 24# csgn. Set @ 340.87 KB. On 1/31/12 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 4 barrels cement to pit. WOC.

> FEB 0 9 2012 OHA OF OIL, GAS & MINING

I hereby certify that the foregoing is true and correct (Printed/ Typed)  Branden Arnold	Title		<del></del>
Signature Tanda Harld	Date 02/01/2012		
THIS SPACE FOR FEI	DERAL OR STATE OFFI	CE USE	
Approved by	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		
Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any p States any false, fictitious and fraudulent statements or representations as to any matter w		to any department or agency of the United	

(Instructions on page 2)

# Casing / Liner Detail

Vell		
Ve!!		

GMBU H-35-8-17

rospect

Monument Butte

-oreman

Run Date:

1/27/2012

String Type

Surface, 8.625", 24#, J-55, LTC (Generic)

# - Detail From Top To Bottom -

Length	JTS	Description		ID
		•		
1.42		Wellhead		
-2.00		Cutoff		
289.00	7	8 5/8 Surface casing	8.620	
38.55	1	Shoe JT	8.620	
0.90		Guide Shoe		
		КВ		
	1.42 -2.00 289.00 38.55	1.42 -2.00 289.00 7 38.55 1	Length         JTS         Description           1.42         Wellhead           -2.00         Cutoff           289.00         7         8 5/8 Surface casing           38.55         1         Shoe JT           0.90         Guide Shoe	Length         JTS         Description         OD           1.42         Wellhead

ement C	company:	3J					
Slurry	# of Sacks	Weight (ppg)	Yield	Volume (ft³)	Description - Slurry Class and Additives		
1	160	15.8	1.17	187.2			
Primiting the terrology by P		4		<u> </u>			
ab-In-Jo	b?		No		Cement To Surface?	Yes	
⊣T:			0		Est. Top of Cement:	0	
tial Circ	ulation Pressu	ıre:			Plugs Bumped?	Yes	
itial Circulation Rate:				Pressure Plugs Bumped:	301		
nal Circ	ulation Pressu	re:			Floats Holding?	Yes	
nal Circ	ulation Rate:				Casing Stuck On / Off Bottom?	No	
isplacement Fluid:			Water		Casing Reciprocated?	No	
splacen	nent Rate:				Casing Rotated?	No	
isplacement Volume:			18.4		CIP:	9:47	
lud Returns:		Full		Casing Wt Prior To Cement:			
entralize	r Type And Pla	acement:			Casing Weight Set On Slips:		
ddle of	first, top of sec	cond and third	for a total	of three.			
**************			**************************************	A CONTRACTOR OF THE PROPERTY O			

Cement Detail

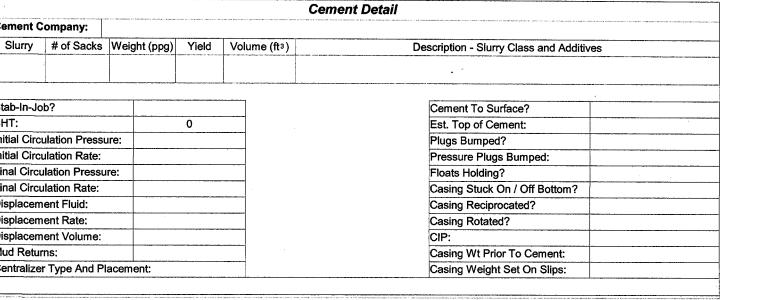


# Casing / Liner Detail

Well	GMBU H-35-8-17
Prospect	Monument Butte
Foreman	
Run Date:	1/27/2012
String Type	Conductor, 14", 36#, H-40, W (Welded)

# - Detail From Top To Bottom -

Depth	Length	JTS	Description	OD	ID
0.00	5.00	1	14" Conductor	14.000	





OPERATOR: NEWFIELD PRODUCTION COMPANY

ADDRESS: RT. 3 BOX 3630

MYTON, UT 84052

OPERATOR ACCT. NO.

N2695

02/01/12

Production Clerk

CODE	CURRENT ENTITY NO	NEW ENTITY NO.	API NUMBER	WELL NAME	WELL LOCATION OU   SC   IP   RG   COUNTY					SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350741	GMBU C-31-8-17	SESW	30	88	17E	DUCHESNE	1/25/2012	211512
VELL 1 C	OMMENTS:		·								1011210
(	GRRV	BHL	: 531 nu							-	
ACTION	CURRENT	1017L	API NUMBER	WELL NAME	7	10/5	LL LOCAT			2010	
CODE	ENTITY NO.	ENTITY NO		· · · · · · · · · · · · · · · · · · ·	QQ	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350742	GMBU D-31-8-17	SESW	30	88	17E	DUCHESNE	1/26/2012	2115112
,											
G	RRV	BHL:	salnw	nu					,	<del>س</del> سيبيدر	
ACTION B	CURRENT ENTITY NO.	NEW ENTITY NO	API NUMBER	WELL NAME	- 00	WE SC	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE
							· · · · ·		4001117	DAIL	
В	99999	17400	4304751629	GMBU H-35-8-17	SWNW	35	85	17E	UINTAH	1/27/2012	2115/12
		BHL: S	swne							Оседин	
CODE	CURRENT ENTITY NO.	NEW ENTITY NO	API NUMBER	WELL NAME	QQ	SC WE	LL LOCAT	ION RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4304751630	GMBU I-35-8-17	SWNE	35	85	17E	UINTAH	1/30/2012	2115112
(-1	RRV	BHL	sione								
ACTION	CURRENT	NEW	API NUMBER	WELL NAME		WE	LL LOCA	rion		SPUD	EFFECTIVE
CODE	ENTITY NO.	ENTITY NO			- 00	sc	TP	RG	COUNTY	DATE	DATE
В	99999	17400	4301350680	GMBU N-30-8-17	Swno	30	85	17E	DUCHESNE	1/27/2012	2/15/12
											·
GR	RRV	BHL: r	rescu								Parisan and American State of the Control of the Co
ACTION	CURRENT	NEW	API NUMBER	WELL NAME			LL LOCA			SPUD	EFFECTIVE
CODE	ENTITY NO	ENTITY NO.			90	SC	TP	RG	COUNTY	DATE	DATE
			·								
1	·				<u></u>	L	L		<u> </u>	***************************************	L.
										1	
ACTION C	CODES (See Instructions on t	hack of form)								<u> </u>	
A - 3	new entity for new well (singl	le well only)							MAA.	1110	
	well to existing entity (group or one existing entity to ano			RECEIVED					Skinature	$N \subseteq N$	Jentri Parl

NOTE: Use COMMENT section to explain why each Action Code was selected

E - ther (explain in comments section)

C - from one existing entity to another existing entity D - well from one existing entity to a new entity

DIV. OF OIL, GAS & MINING

FEB 0 1 2012

Sundry Number: 24984 API Well Number: 43047516290000

			FORM 9
	STATE OF UTAH		I SKIII S
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MINI		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-40026
SUNDR	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:		
	oposals to drill new wells, significantly direenter plugged wells, or to drill horizoning for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU H-35-8-17
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	OMPANY		9. API NUMBER: 43047516290000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT		PHONE NUMBER: Ext	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2078 FNL 2203 FEL			COUNTY: UINTAH
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 35 Township: 08.0S Range: 17.0E Meridia	an: S	STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICATE	NATURE OF NOTICE, REPOR	RT, OR OTHER DATA
TYPE OF SUBMISSION		TYPE OF ACTION	
	ACIDIZE	ALTER CASING	CASING REPAIR
NOTICE OF INTENT	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME
Approximate date work will start:	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN [	FRACTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK
	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
SPUD REPORT Date of Spud:			
	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	LI TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR	UVENT OR FLARE	WATER DISPOSAL
Report Date: 3/16/2012	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION
0/10/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:
I .	COMPLETED OPERATIONS. Clearly show all vas placed on production on hours.	03/16/2012 at 16:00	Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY April 26, 2012
Jennifer Peatross	435 646-4885	Production Technician	
SIGNATURE N/A		<b>DATE</b> 4/20/2012	

Sundry Number: 30770 API Well Number: 43047516290000

	STATE OF UTAH			FORM 9					
ι	DEPARTMENT OF NATURAL RESOU DIVISION OF OIL, GAS, AND M		i	5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-40026					
SUNDRY NOTICES AND REPORTS ON WELLS  6. IF INDIAN, ALLOTTEE OR T									
	oposals to drill new wells, significant reenter plugged wells, or to drill hori n for such proposals.		7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)						
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU H-35-8-17						
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO		9. API NUMBER: 43047516290000							
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,	, 84052 435 646-48		NE NUMBER: t	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE					
4. LOCATION OF WELL FOOTAGES AT SURFACE: 2078 FNL 2203 FEL				COUNTY: UINTAH					
QTR/QTR, SECTION, TOWNSH Qtr/Qtr: SWNE Section: 3	HIP, RANGE, MERIDIAN: 35 Township: 08.0S Range: 17.0E Me	eridian:	S	STATE: UTAH					
11. CHECH	K APPROPRIATE BOXES TO INDIC	CATE NA	ATURE OF NOTICE, REPOR	RT, OR OTHER DATA					
TYPE OF SUBMISSION			TYPE OF ACTION						
	ACIDIZE		LTER CASING	CASING REPAIR					
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	☐ c	HANGE TUBING	CHANGE WELL NAME					
	CHANGE WELL STATUS	□ c	OMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE					
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	□ F	RACTURE TREAT	NEW CONSTRUCTION					
	OPERATOR CHANGE	P	LUG AND ABANDON	PLUG BACK					
SPUD REPORT	✓ PRODUCTION START OR RESUME	□ R	ECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION					
Date of Spud:	REPERFORATE CURRENT FORMATION	□s	IDETRACK TO REPAIR WELL	TEMPORARY ABANDON					
	TUBING REPAIR		ENT OR FLARE	WATER DISPOSAL					
✓ DRILLING REPORT Report Date:	WATER SHUTOFF		I TA STATUS EXTENSION	APD EXTENSION					
3/16/2012									
	WILDCAT WELL DETERMINATION		THER	OTHER:					
12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.  The above well was placed on production on 03/16/2012 at 16:00 hours. Production Start Sundry re-sent 10/07/2012.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ON October 12, 2012									
NAME (DI SACE PRINT)	BUOMETON	MDED	TIT! C						
NAME (PLEASE PRINT) Kaci Deveraux	<b>PHONE NUI</b> 435 646-4867	NRFK	<b>TITLE</b> Production Technician						
SIGNATURE N/A			<b>DATE</b> 10/7/2012						

Sundry Number: 30770 API Well Number: 43047516290000

	STATE OF UTAH		FORM 9						
	DEPARTMENT OF NATURAL RESOURCE DIVISION OF OIL, GAS, AND MIT		5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-40026						
SUNDR	RY NOTICES AND REPORTS	ON WELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:						
Do not use this form for pro current bottom-hole depth, I FOR PERMIT TO DRILL form	posals to drill new wells, significantly reenter plugged wells, or to drill horizo n for such proposals.	deepen existing wells below ontal laterals. Use APPLICATION	7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)						
1. TYPE OF WELL Oil Well			8. WELL NAME and NUMBER: GMBU H-35-8-17						
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY		9. API NUMBER: 43047516290000						
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT	, 84052 435 646-482	PHONE NUMBER: 5 Ext	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE						
4. LOCATION OF WELL FOOTAGES AT SURFACE:			COUNTY: UINTAH						
2078 FNL 2203 FEL QTR/QTR, SECTION, TOWNSI Qtr/Qtr: SWNE Section: 3	<b>HIP, RANGE, MERIDIAN:</b> 35 Township: 08.0S Range: 17.0E Meri	dian: S	STATE: UTAH						
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NATURE OF NOTICE, REPO	RT, OR OTHER DATA						
TYPE OF SUBMISSION		TYPE OF ACTION							
	ACIDIZE	ALTER CASING	CASING REPAIR						
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHANGE TUBING	CHANGE WELL NAME						
	CHANGE WELL STATUS	COMMINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE						
SUBSEQUENT REPORT  Date of Work Completion:	DEEPEN	FRACTURE TREAT	NEW CONSTRUCTION						
	OPERATOR CHANGE	PLUG AND ABANDON	PLUG BACK						
SPUD REPORT	✓ PRODUCTION START OR RESUME	RECLAMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION						
Date of Spud:	REPERFORATE CURRENT FORMATION	SIDETRACK TO REPAIR WELL	TEMPORARY ABANDON						
	TUBING REPAIR	VENT OR FLARE	WATER DISPOSAL						
DRILLING REPORT Report Date:	WATER SHUTOFF	SI TA STATUS EXTENSION	APD EXTENSION						
3/16/2012	WILDCAT WELL DETERMINATION	OTHER	OTHER:						
40 DESCRIPE PROPOSED OR	COMPLETED OPERATIONS. Clearly show	all pertinent details including dates.	denths, volumes, etc.						
The above well w	as placed on production on	03/16/2012 at 16:00 ho	urs. Production Start Sundry						
1110 00010 11011 11	re-sen	t 10/07/2012.	•						
NAME (PLEASE PRINT)	PHONE NUM	BER TITLE							
Kaci Deveraux	435 646-4867	Production Technician							
SIGNATURE N/A		<b>DATE</b> 10/7/2012							

# **Daily Activity Report**

# Format For Sundry GMBU H-35-8-17 1/1/2012 To 5/30/2012

3/5/2012 Day: 1

Completion

Rigless on 3/5/2012 - bond long and pressure tested and perf 1st stage as per proceedure. - bond long and pressure tested and perf 1st stage as per proceedure. - frac and flowback well as per procedure - frac and flowback well as per procedure - bond long and pressure tested and perf 1st stage as per proceedure.

Daily Cost: \$0

Cumulative Cost: \$18,382

3/7/2012 Day: 3 Completion

Nabors #1450 on 3/7/2012 - Moved Sand Master off location, Unloaded tubing off truck, 210 Jts 2 7/8 J-55 on location. MI WOR and ND frac valve, NU 5K 7 1/16" pipe BOP. Tested stack, all test good w/chart. Tallied 1st row of 2 7/8 tbing. SDFN, Closed well in - RD 4 Star Testers, Tallied 1st row of production tubing on rack. SDFN. Closed well in - RU 4 Star testing for function pressure test of each rig BOP stack. Run test sub and with PTP thru BOP's and land in tubing head. Stab TIW valve in tbing and begin L/H test of stack. Test both out and inside valves 200 psi for 5 min/5000 10 min psi, and had good test. Tested lower BOP and TIW Valve at 200/5000 psi for same time. Lower BOP and TIW valve test good, Tested upper BOP and TIW valve at same pressure and time, Upper BOP and TIV valve tested good. Closed the kill line and bled off to zero and held for 5 min, negitive test was good. Charted all test and charts were signed. - RU Nabors Rig #1450, Held safety meeting with Nabors crew. Open well, no pressure. ND Manual frac valve. Set to side. NU 5K 7 1/16" pipe BOP with 2 7/8 rams. Prepared to test stack. Held safety meeting with crew and testers for testing stack. - Baker hughes moved off sand king. - Unload production tubing on to racks (CTRP) 210 jts 2 7/8 6.5 J-55 on location.

Daily Cost: \$0

Cumulative Cost: \$182,656

3/8/2012 Day: 4 Completion

Nabors #1450 on 3/8/2012 - PU tbging and BHA to drill plugs, ( 5 total plugs to drill), Drilled Kill plug and 4 lower plugs. Circulated hole till clean, SDFN, close well in - Drilled kill plug, 200 psi under plug. PU tbg for next plug. 2nd plug, 30' sand on plug, circulated sand and drilled thru plug, 200 psi under plug, circulated bottoms up for sand, PU tbging for 3rd plug. (Transferred 470 bbls water from frac tanks to rig WO tank, all frac tanks o/l empty). Drilled thru 2nd plug, no fill, (800 psi increase plus oil) Thru plug and circulated for pressure to come down to 200 psi, SD, PU tbging for 3rd plug, 120' fill on plug, clean down to 3rd plug, drilled thru, 200 psi under plug. Circulated sand till well clean. PU tbg for last plug.30' fill on top last plug, 200 psi under plug, circulate 140 bbls and SDFN. Close well in. - Held safety meeting, Open well, zero pressure. - RIH with 2 7/8 J-55 6.5 tbging. (BHA - Chomp bit, XO sub, 2 7/8 tubing). Kill plug appox. 4366'. Tagged kill plug ( 142 jts) RU Swival and prepare to drill kill plug.

Daily Cost: \$0

**Cumulative Cost:** \$195,471

3/9/2012 Day: 5 Completion

Nabors #1450 on 3/9/2012 - clean hole, swab well clean, circulate 140 bbls brine,LD 11 joints, stand back 199 to land. Moved all frac tanks to well I-1-9-16.SDFN - Held safety meeting, open well, 120 psi, well flowing about 2 bph, PU tbing, clean to PBTD. 45' fill PB.TU on top of plug at 6358' - RD Swab line, circulate 140 bbls of brine in hole. Pull 11 joints and LD on rack, stand back 199 jts to land. 73 jts still in hole. SDFN, closed well in - Circulated 140 bbls to clean hole, (hole clean). BOT @ PB. - LD 3 jts, RU swab line, 1st pull, fluid at surface, pulled 1500', recovered 4 bbls per run, fluid level dropping about 150' per run.Recovered load fluid, well clean.

Daily Cost: \$0

**Cumulative Cost:** \$206,671

### 3/10/2012 Day: 6

Completion

Nabors #1450 on 3/10/2012 - Run tbging and hang off, run rods and space out, stroke test to 800 psi, Open to sales, SDFN. - TIH with rod assembly per pump and string design. Ran 86 7/8, 152 3/4, 5 stableizer w/ 5 sinker bars, 1 pump, 1 2' pony rod on top polish rod. Spaced out, stroke test to 800 psi, Called production, SDFN. - Lunch brk - POOH remainder of tbg, RIH w/production string and BHA.Tbg and BHA as follows: EOT @ 6212.32, NC .4", 2-jts (62.57'),SN 1.1", 1-jt tbg (31.26'), 1 TAC (2.8") @ 6114.19, 196 jts 2 7/8 J-55 tbging (6101.19') 13' KB, total footage 6212.32'. - Safety meeting with Nabors crew, rig #1450. -TIH w/BHA and tbging, space out to tbging hanger. Set tbging with hangerand ensure lockdown pins are good. RD workfloor. ND BOPs and master valve. Land tbging in well head w/18000 # to 20000 #.

Daily Cost: \$0

**Cumulative Cost:** \$216,513

#### 3/12/2012 Day: 7

Completion

Nabors #1450 on 3/12/2012 - Hang off rods, RD WOR, Well ready for production - Safety Meeting - Hang off rods to pumping unit. RDWO PWOP

Daily Cost: \$0

**Cumulative Cost:** \$282,443

Pertinent Files: Go to File List

Form 3160-4 (August 2007)

### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

WELL	COMPLETION	OR RECOMPLE	TION REPORT AND LOG

	Wi	ELL CO	MPLE	TION OR	RECOMPLI	ETION	I REPORT A	ND LO	3		5. Lease Ser		
la. Type of V		✓Oil V	Vell Well	Gas Well	Dry	Othe	r Back  Diff	Pacur			6. If Indian,	Allottee or T	ribe Name
o. 1900 or v	ompretion.	Othe		- WOLK OV	Берен і	I rag	-	. Kesvi.,				A Agreement	Name and No.
2. Name of ONEWFIELD	Operator D EXPLOR	RATION (	COMPA	NY			<u></u>					me and Well	No.
3. Address				/ER, CO 80202			3a. Phone N (435) 646		area code)		9. AFI Well 43-047-51	No	
					rdance with Fed	eral requ		-0121	<del>,</del> ,		10. Field an	d Pool or Exp	oloratory
At surface	2078' FN	NL & 220	3' FEL (	(SW/NE) SE	C. 35, T8S, R	17F (L)	TU-40026)				MONUME	P M on P	lock and
			,	( - · · · · - )	, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(0	10 100207				Survey	or Area SEC.	35, T8S, R17E
At top pro	d. interval r	eported be	low 145	59' FNL & 24	153' FEL (SW/	NE) SE	C. 35, T8S, R	17E (UTU-	-40026)		12. County		13. State
At total de	pth 1134'	FNL & 2	579' FE	L (NW/NE)	SEC. 35, T8S,	R17E	(UTU-40026)			<u> </u>	UINTAH		UT
14. Date Sp 01/27/201	2			ate T.D. Reac 9/2012			16. Date Comp	oleted 03/1 Read			17. Elevation 5037' GL	ns (DF, RKE 5050' KB	3, RT, GL)*
18. Total De		6405' 6312'		19.	Plug Back T.D.:	MD (	6358' 62 <i>65</i> 5	20.	Depth Brid	ge Plug S	et: MD TVD		
				Run (Submit					Was well o		✓ No 🗆	Yes (Submit Yes (Submit	
				strings set in w		K,CALIF	PER, CMT BOI	MD			No Z		
Hole Size	Size/Gra		(#/ft.)	Top (MD)		(D)	Stage Cementer Depth	No. of S		Slurry V (BBL		ent Top*	Amount Pulled
12-1/4"	8-5/8" J-	55 24#	<b>#</b>	0	341'		Берш	160 CLAS		(DDL	<u> </u>		
7-7/8"	5-1/2" J-	55 15.	5#	0	6404'	_		240 PRIN			88'		
						-	<u>-</u>	440 50/50	0 POZ				
24. Tubing	Pecord												
Size	Depth S	Set (MD)		r Depth (MD)	Size	Г	Depth Set (MD)	Packer Dep	th (MD)	Size	Dep	h Set (MD)	Packer Depth (MD)
2-7/8" 25. Produci			TA @ 6	3114'		26.	Perforation I	Record					
	Formation			Тор	Bottom		Perforated In		Si		No. Holes		Perf. Status
A) Green I B)	River		44	.66'	6169'	44	166-6169'		0.34"		72		
C)													
D)													
27. Acid, F	racture, Trea Depth Inter		ment Squ	ueeze, etc.				Amount and	Type of Ma	iterial			
4466-6169	9'		Fra	ac w/ 23966	7# 20/40 white	sand i	n 2160 bbls Liç						
					. ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,								
28. Product Date First		l A Hours	Test	Oil	Gas	Water	Oil Grav	zitv	Gas	Produc	ction Method		
Produced		Tested	Produc	tion BBL	MCF	BBL	Corr. Al		Gravity		" x 1-3/4" x 2	20' x 24' RH	IAC Pump
3/11/12 Choke	3/26/12 Tbg. Press.	24 Csg	24 Hr.	86 Oil	Gas	36 Water	Gas/Oil		Well Status	.			
Size	Flwg. SI	Press.	Rate	BBL	MCF	BBL	Ratio		PRODUC				
28a. Produc Date First		al B Hours	Test	Oil	Gas	Water	Oil Grav	,ita	Koa	D 4	otion Matha I		
Produced	rest Date	Tested	Produc	etion BBL	MCF	BBL	Corr. Al		Gas Gravity	Produ	ction Method		
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio		Weil Status	.			EIVED
	<u> </u>											oci 2	4 2012

					·····					
28b. Produ Date First	uction - Inte	rval C Hours	Test	Oil	Gas	Water	0:10	h.	b 1 / 3 / 1	
Produced	rest Date	Tested	Production	BBL	MCF	BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	Tbg. Press. Flwg. SI	Csg. Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
	ıction - Inte						1			· · · · · · · · · · · · · · · · · · ·
Date First Produced	Test Date	Hours Tested	Test Production	Oil BBL	Gas MCF	Water BBL	Oil Gravity Corr. API	Gas Gravity	Production Method	
Choke Size	SI	Press.	24 Hr. Rate	Oil BBL	Gas MCF	Water BBL	Gas/Oil Ratio	Well Status		
29. Dispos	sition of Gas	s (Solid, u	sed for fuel, v	ented, etc.	)			•		
	USED FOR F									
30. Sumn	nary of Poro	ous Zones	(Include Aqu	ifers):				31. Format	ion (Log) Markers	
Show a includi	ng depth int	t zones of terval teste	porosity and o	contents the	nereof: Cored ool open, flow	intervals and al	Il drill-stem tests, pressures and	GEOLOG	GICAL MARKERS	
For	nation	Тор	Bottom		Des	criptions, Conte	ents, etc.		Name	Top Meas. Depth
GREEN RI	VER	4466'	6169'					GARDEN GU GARDEN GU	ULCH MARKER ULCH 1	3989' 4171'
								GARDEN GI POINT 3 MR		4288' 4559'
								X MRKR Y MRKR		4791' 4829'
				:				DOUGLAS ( BI-CARBON		4960' 5212'
								B LIMESTOI CASTLE PE		5368' 5818'
								BASAL CAR	BONATE	6239'
-										
32. Addit	ional remari	ks (include	e plugging pro	ocedure);						
33. Indica	ate which ite	ems have t	een attached	by placing	g a check in th	e appropriate be	oxes:			
☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey ☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other:										
34. I here	by certify the	hat the fore	egoing and at	tached inf	ormation is co	mplete and corr	rect as determined	from all available	records (see attached instruction	ns)*
			ennifer Pea					ction Technician		
	ignature	Ne	atro	55			Date 07/10/2			
Title 18 U	J.S.C. Section itious or frau	on 1001 an udulent sta	d Title 43 U.s	S.C. Section	on 1212, make	it a crime for a	any person knowir s jurisdiction.	gly and willfully to	o make to any department or ag	ency of the United States any

(Continued on page 3) (Form 3160-4, page 2)



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 35 T8, R17 H-35-8-17

Wellbore #1

Design: Actual

# **Standard Survey Report**

18 February, 2012





Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site: Well: **SECTION 35 T8, R17** 

Wellbore:

H-35-8-17 Wellbore #1

Design:

Actual

Local Co-ordinate Reference:

**TVD Reference:** 

Well H-35-8-17

Grid

H-35-8-17 @ 5049.0ft (Capstar 328)

MD Reference:

Database:

H-35-8-17 @ 5049.0ft (Capstar 328)

North Reference:

**Survey Calculation Method:** 

Minimum Curvature

EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System: Geo Datum:

Map Zone:

US State Plane 1983

North American Datum 1983

Utah Central Zone

System Datum:

Mean Sea Level

Site

**SECTION 35 T8, R17** 

Site Position:

Lat/Long

Northing: Easting:

7,200,039.79 ft

Latitude:

40° 4' 33.420 N

From:

0.0 ft

2,067,907.84 ft

Longitude:

109° 58' 20.010 W

**Position Uncertainty:** 

Slot Radius:

Grid Convergence:

0.98°

Well

H-35-8-17, SHL LAT: 40 04 33.42 LONG: -109 58 20.01

**Well Position** 

+N/-S +E/-W 0.0 ft 0.0 ft

Northing: Easting:

7,200,039.78 ft 2,067,907.84 ft

Latitude: Longitude:

40° 4' 33.420 N 109° 58' 20.010 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,049.0 ft

**Ground Level:** 5,037.0 ft

Wellbore

Wellbore #1

Magnetics

**Model Name** 

Sample Date

Declination (°)

Dip Angle (°)

Field Strength (nT)

IGRF2010

2/3/2011

11.33

65.85

52,340

Design

Actual

**Audit Notes:** 

Version:

1.0

Phase:

ACTUAL

**Vertical Section:** 

Depth From (TVD) (ft)

0.0

+N/-S (ft)

0.0

Tie On Depth: +E/-W (ft)

0.0

0.0 Direction (°)

338.02

Survey Program

Date 2/18/2012

From (ft)

353.0

То

Survey (Wellbore) 6,405.0 Survey #1 (Wellbore #1) **Tool Name** MWD

Description MWD - Standard

Survey

Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
353.0	0.50	60.50	353.0	0.8	1.3	0.2	0.14	0.14	0.00
374.0	0.31	31.20	374.0	0.9	1.4	0.2	1.31	-0.90	-139.52
404.0	0.40	340.96	404.0	1.0	1.5	0.4	1.04	0.30	-167.47
434.0	0.50	334.20	434.0	1.2	1.4	0.6	0.38	0.33	-22.53
465.0	0.70	319.80	465.0	1.5	1.2	1.0	0.80	0.65	-46.45
496.0	0.90	319.90	496.0	1.8	0.9	1.4	0.65	0.65	0.32
526.0	1.20	328.10	526.0	2.3	0.6	1.9	1.12	1.00	27.33
557.0	1.50	335.80	557.0	2.9	0.3	2.6	1.13	0.97	24.84
588.0	1.80	337.20	588.0	3.7	-0.1	3.5	0.98	0.97	4.52
619.0	2.00	341.60	618.9	4.7	-0.5	4.5	0.80	0.65	14.19
649.0	2.20	337.30	648.9	5.7	-0.9	5.6	0.85	0.67	-14.33
680.0	2.30	337.40	679.9	6.9	-1.3	6.9	0.32	0.32	0.32



Survey Report



Company:

NEWFIELD EXPLORATION

Project:

USGS Myton SW (UT)

Site: Well: SECTION 35 T8, R17 H-35-8-17

Wellbore: Design: Wellbore #1 Actual Local Co-ordinate Reference:

TVD Reference: MD Reference: Well H-35-8-17

H-35-8-17 @ 5049.0ft (Capstar 328)

H-35-8-17 @ 5049.0ft (Capstar 328)

North Reference: Survey Calculation Method:

Minimum Curvature

Database:

EDM 2003.21 Single User Db

Measured			Vertical			Vertical	Doel	D 11 - 1	<b>-</b>
Depth	inclination	Azimuth	Depth	+N/-S	+E/-W	vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
711.0	2.50	337.40	710.9	8.1	-1.8	8.2	0.65	0.65	0.00
741.0	2.70	337.00	740.8	9.3	-2.3	9.5	0.67	0.67	-1.33
772.0	3.10	339.70	771.8	10.8	-2.9	11.1	1.36	1.29	8.71
803.0	3.50	341.80	802.8	12.5	-3.5	12.9	1.35	1.29	6.77
833.0	3.80	343.40	832.7	14.3	-4.1	14.8	1.06	1.00	5.33
878.0	4.30	342.50	877.6	17.3	-5.0	17.9	1.12	1.11	-2.00
923.0	4.50	341.70	922.4	20.6	-6.1	21.4	0.46	0.44	-1.78
969.0	4.80	340.60	968.3	24.1	-7.3	25.1	0.68	0.65	-2.39
1,014.0	5.30	340.00	1,013.1	27.9	-8.6	29.1	1.12	1.11	-1.33
1,059.0	5.90	339.80	1,057.9	32.0	-10.1	33.4	1.33	1.33	-0.44
1,105.0	6.50	338.10	1,103.6	36.6	-11.9	38.4	1.36	1.30	-3.70
1,150.0	7.10	337.70	1,148.3	41.6	-13.9	43.7	1.34	1.33	-0.89
1,195.0	7.90	338.60	1,192.9	47.0	-16.1	49.6	1.80	1.78	2.00
1,241.0	8.80	338.80	1,238.4	53.2	-18.5	56.3	1.96	1.96	0.43
1,286.0 1,331.0	9.40 10.20	337.30 336.90	1,282.9	59.8	-21.2	63.4	1.43	1.33	-3.33
1,331.0	10.20	336.80 336.80	1,327.2 1,371.5	66.9 74.5	-24.2 -27.4	71.1 79.3	1.78 1.56	1.78	-0.89
							1.56	1.56	-0.22
1,422.0	11.40	337.10	1,416.6	82.6	-30.9	88.2	1.09	1.09	0.65
1,467.0 1,512.0	11.70 11.80	336.20 335.10	1,460.7 1,504.7	90.9 99.3	-34.5 -38.2	97.2	0.78	0.67	-2.00
1,558.0	12.10	334.20	1,549.7	107.9	-42.3	106.4 115.9	0,55 0.77	0.22 0.65	-2.44 -1.96
1,603.0	12.20	335.30	1,593.7	116.4	-46.4	125.3	0.56	0.22	2.44
1,648.0	12.10	335.70	1,637.7						
1,693.0	12.30	335.30	1,681.7	125.1 133.7	-50,3 -54,2	134.8 144.3	0.29 0.48	-0.22 0.44	0.89
1,739.0	12.40	336.90	1,726.6	142.7	-58.2	154.1	0.48	0.44	-0.89 3.48
1,784.0	12.50	336.90	1,770.6	151.6	-62.0	163.8	0.22	0.22	0.00
1,829.0	12.30	337.70	1,814.5	160.5	-65.8	173.5	0.59	-0.44	1.78
1,875.0	11,80	339.20	1,859.5	169.5	-69.3	183.1	1.28	-1.09	3.26
1,920.0	11.10	339.20	1,903.6	177.8	-72.5	192.0	1.56	-1.56	0.00
1,965.0	11.20	339.30	1,947.8	186.0	<i>-</i> 75.5	200.7	0.23	0.22	0.22
2,010.0	10.90	338.60	1,991.9	194.0	-78.6	209.3	0.73	-0.67	-1.56
2,056.0	10.90	338.90	2,037.1	202.1	-81.8	218.0	0.12	0.00	0.65
2,101.0	11,30	340.40	2,081.3	210.2	-84.8	226.7	1.10	0.89	3.33
2,146.0	11.10	337.90	2,125.4	218.4	-87.9	235.4	1.17	-0.44	-5.56
2,192.0	11.10	334.90	2,170.6	226.5	-91.5	244.3	1.26	0.00	-6.52
2,237.0 2,282.0	11.00 10.70	334.30	2,214.7	234.3	-95.2	252.9	0.34	-0.22	-1.33
		335.40	2,258.9	242.0	-98.8	261.4	0.81	-0.67	2.44
2,328.0	10.40	335.40	2,304.1	249.6	-102.3	269.8	0.65	-0.65	0.00
2,373.0	10.40	335.90	2,348.4	257.0	-105.6	277.9	0.20	0.00	1.11
2,418.0 2,463.0	10.60 10.30	336.10 336.30	2,392.6 2,436.9	264.5 272.0	-108.9 -112.2	286.1 294.2	0.45	0.44	0.44
2,403.0	9.80	336.30	2,436.9	272.0	-112.2 -115.5	294.2 302.3	0.67 1.09	-0.67 -1.09	0.44 0.00
2,554.0	9.50								
2,554.0 2,599.0	9.90	337.80 340.20	2,526.6 2,570.9	286.3 293.4	-118.4	309.8	0.87	-0.67	3.33
2,599.0	10.20	340.20	2,570.9	293.4 301.0	-121.1 -123.8	317.4 325.4	1.26 0.82	0.89 0.65	5.33 2.83
2,690.0	10.60	342.20	2,660.5	308.7	-126.3	333.5	0.93	0.89	1.56
2,735.0	11.10	341.40	2,704.7	316.7	-128.9	342.0	1.16	1.11	-1.78
2,780.0	11.90	340.90	2,748.8	325.2	-131.8	350.9	1.79	1.78	-1.11
2,825.0	12.30	338.50	2,792.8	334.1	-135.1	360.3	1.43	0.89	-5.33
2,870.0	11.90	336.10	2,836.8	342.8	-138.7	369.8	1.43	-0.89	-5.33
2,914.0	11.50	332.80	2,879.8	350.8	-142.6	378.7	1.77	-0.91	-7.50
2,961.0	10.60	329.00	2,926.0	358.7	-147.0	387.6	2.46	-1.91	-8.09
3,006.0	10.10								



Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site: Well: **SECTION 35 T8, R17** H-35-8-17

Wellbore:

Wellbore #1

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

Well H-35-8-17

H-35-8-17 @ 5049.0ft (Capstar 328) H-35-8-17 @ 5049.0ft (Capstar 328)

North Reference:

Minimum Curvature

**Survey Calculation Method:** 

elibore: esign:	Acti	ual			Database:	Ilculation Meth		Minimum Curvature EDM 2003.21 Single User Db			
rvey											
	sured			Vertical			Vertical	Dogleg	Build	Turn	
	pth	inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate	
ľ	ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)	
;	3,097.0	10.00	332.70	3,059.9	379.4	-158.8	411.3	0.60	0.00	3.48	
	3,142.0	9.90	336.10	3,104.2	386.5	-162.2	419.1	1.32	-0.22	7.56	
	3,187.0	10.40	339.30	3,148.5	393.8	-165.2	427.0	1.67	1.11	7.11	
	3,232.0	11.60	339.80	3,192.6	401.8	-168.2	435.6	2.68			
	3,278.0	12.50	339.00	3,237.6	410.8	-171.6	435.6 445.2	1.99	2.67	1.11	
	3,323.0	12.10	337.80	3,281.6	419.7	-171.0	454.8	1.05	1.96 -0.89	-1.74 -2.67	
	3,369.0	10.94	334.24	3,326.7	428.1	-178.8	463.9	2.96	-2.52	-2.67 -7.74	
	3,414.0	10.70	331.50	3,370.9	435.6	-182.6	472.3	1.26	-0.53	-6.09	
	3,458.0	11 10									
	3,504.0	11.10 11.60	333.90 335.60	3,414.1 3,459.2	443.0	-186.5	480.6	1.37	0.91	5.45	
	3,550.0	11.40			451.2	-190.3	489.7	1.31	1.09	3.70	
	3,595.0	10.90	334.50 335.60	3,504.3 3,548.4	459.5 467.4	-194.2 -197.9	498.8	0.65	-0.43	-2.39	
	3,640.0	10.10	336.50	3,546.4 3,592.7	467.4 474.9	-197.9 -201.2	507.5	1.21	-1.11	2.44	
							515.7	1.81	-1.78	2.00	
	3,686.0	9.80	339.29	3,638.0	482.3	-204.2	523.7	1.23	-0.65	6.07	
	3,731.0	9.90	340.50	3,682.3	489.5	-206.8	531.3	0.51	0.22	2.69	
	3,776.0	10.20	342.20	3,726.6	497.0	-209.3	539.2	0.94	0.67	3.78	
	3,822.0	10.70	343.30	3,771.8	504.9	-211.8	547.5	1.17	1.09	2.39	
;	3,867.0	10.70	341.40	3,816.1	512.9	-214.3	555.8	0.78	0.00	-4.22	
;	3,912.0	10.30	339.20	3,860.3	520.6	-217.1	564.0	1.26	-0.89	-4.89	
;	3,957.0	10.60	340.30	3,904.6	528.3	-219.9	572.2	0.80	0.67	2.44	
	4,002.0	10.80	345.20	3,948.8	536.2	-222.4	580.5	2.07	0.44	10.89	
	4,047.0	10.50	346.20	3,993.0	544.3	-224.5	588.7	0.78	-0.67	2.22	
•	4,093.0	10.40	345.30	4,038.2	552.4	-226.5	597.0	0.42	-0.22	-1.96	
	4,138.0	10.50	343.70	4,082.5	560.2	-228.7	605.1	0.68	0.22	-3.56	
	4,183.0	11.30	342.80	4,126.7	568.4	-231.1	613.6	1.82	1.78	-2.00	
	4,229.0	11.70	341.40	4,171.8	577.1	-234.0	622.7	1.06	0.87	-3.04	
	4,274.0	11.90	340.40	4,215.8	585.8	-237.0	631.9	0.64	0.44	-2.22	
	4,319.0	11.70	339.70	4,259.9	594.5	-240.1	641.1	0.55	-0.44	-1.56	
	4,364.0	11.10	338.50	4,304.0	602.8	-243.3					
	4,410.0	10.80	337.50	4,349.1	610.9	-243.3 -246.6	650.0 658.8	1.43 0.77	-1.33	-2.67	
	4,455.0	10.60	337.80	4,393.4	618.6	-249.7	667.1	0.77	-0.65 -0.44	-2.17 0.67	
	4,500.0	10.60	338.70	4,437.6	626.3	-252.8	675.4	0.37	0.00	0.67 2.00	
	4,546.0	11.10	339.90	4,482.8	634.4	-255.9	684.0	1.19	1.09	2.61	
	4,591.0	11.00	340.70	4,526.9	642.5	-258.8	692.7	0.41	-0.22	1.78	
	4,637.0	10.30	339.90	4,572.1	650.5	-261.6	701.2	1.56	-1.52	-1.74	
	4,682.0	10.10	337.10	4,616.4	657.9	-264.5	709.1	1.19	-0.44	-6.22	
	4,727.0 4.772.0	10.20	338.00	4,660.7	665.3	-267.6	717.1	0.42	0.22	2.00	
	4,772.0	10.30	338.80	4,705.0	672.7	-270.5	725.1	0.39	0.22	1.78	
	4,817.0	10.30	339.50	4,749.3	680.2	-273,4	733.1	0.28	0.00	1.56	
	4,863.0	10.30	337.90	4,794.5	687.9	-276.4	741.3	0.62	0.00	-3.48	
	4,908.0	10.70	338.40	4,838.8	695.5	-279.4	749.5	0.91	0.89	1.11	
	4,953.0	11.10	338.00	4,883.0	703.4	-282.6	758.0	0.90	0.89	-0.89	
•	4,999.0	11.30	336.80	4,928.1	711.6	-286.0	767.0	0.67	0.43	-2.61	
:	5,044.0	11.50	335.80	4,972.2	719.8	-289,6	775.9	0.62	0.44	-2,22	
:	5,089.0	11.50	336.30	5,016.3	728.0	-293.2	784.8	0.22	0.00	1.11	
:	5,134.0	10.80	338.60	5,060.5	736.0	-296.6	793.5	1.84	-1.56	5,11	
	5,180.0	10.20	341.20	5,105.7	743.9	-299.5	801.9	1.66	-1.30	5.65	
;	5,225.0	9.70	340.20	5,150.0	751.2	-302.0	809.7	1.18	-1.11	-2.22	
	5,270.0	9.60	341.60	5,194.4	758.4	-304.5	817.2	0.57	-0.22	3.11	
	5,275.0	9.60	341.79	5,199.3	759.2	-304.8	818.0	0.62	-0.01	3.70	
	5-8-17 TG									<b></b>	
	5,316.0	9.60	343.30	5,239.7	765.7	-306.8	824.9	0.62	0.00	3.70	
	5,361.0	9.90	343.90	5,284.1	773.0	-309.0	832.4	0.70	0.67	1.33	
	5,406.0	9.10	342.60	5,328.5	780.1	-311.1	839.8	1.84	-1.78	-2.89	



Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site: Well: **SECTION 35 T8, R17** 

Wellbore: Design:

Wellbore #1

H-35-8-17

Actual

Local Co-ordinate Reference:

TVD Reference: MD Reference:

Database:

Well H-35-8-17

H-35-8-17 @ 5049.0ft (Capstar 328)

H-35-8-17 @ 5049.0ft (Capstar 328)

North Reference: **Survey Calculation Method:** 

Minimum Curvature

EDM 2003.21 Single User Db

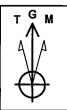
						EDW 2000.21 Gingle User DD			
y									
Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,451.0	9.00	340.70	5,372.9	786.8	-313.3	846.9	0.70	-0.22	-4.22
5,497.0	9.40	339.40	5,418.3	793.7	-315.8	854.2	0.98	0.87	-2.83
5,542.0	9.90	338.90	5,462.7	8.008	-318.5	861.8	1.13	1.11	-1.11
5,587.0	10.90	337.40	5,506.9	808.3	-321.6	869.9	2.30	2.22	-3.33
5,633.0	11.30	335.00	5,552.1	816.4	-325.1	878.8	1.33	0.87	-5.22
5,678.0	10.85	334.81	5,596.2	824.2	-328.8	887.4	1.00	-1.00	-0.42
5,724.0	9.62	337.58	5,641.5	831.7	-332.1	895.6	2.88	-2.67	6.02
5,769.0	8.90	339.60	5,685.9	838.4	-334.8	902.8	1.76	-1.60	4.49
5,814.0	8.70	339.00	5,730.4	844.9	-337.2	909.7	0.49	-0.44	-1.33
5,859.0	9.30	338.40	5,774.8	851.4	-339.7	916.7	1.35	1.33	-1.33
5,905.0	9.80	337.50	5,820.2	858.5	-342.6	924.3	1.13	1.09	-1.96
5,951.0	9.90	340.60	5,865.5	865.9	-345.4	932.2	1.17	0.22	6.74
5,996.0	10.50	343.70	5,909.8	873.4	-347.9	940.2	1.81	1.33	6.89
6,041.0	11.10	342.90	5,954.0	881.5	-350.3	948.6	1.37	1.33	~1.78
6,087.0	10.90	339.80	5,999.2	889.8	-353.1	957.3	1.36	-0.43	-6.74
6,132.0	10.90	338.00	6,043.3	897.8	-356.1	965.8	0.76	0.00	-4.00
6,177.0	11.20	336.20	6,087.5	905.7	-359.5	974.4	1.02	0.67	-4.00
6,222.0	10.80	334.80	6,131.7	913.5	-363.1	983.0	1.07	-0.89	-3.11
6,267.0	10.50	336.40	6,175.9	921.1	-366.5	991.3	0.94	-0.67	3.56
6,313.0	10.80	337.30	6,221.1	928.9	-369.8	999.8	0.75	0.65	1.96
6,358.0	10.00	338.60	6,265.4	936.4	-372.9	1,008.0	1.85	-1.78	2.89
6,405.0	10.00	338.60	6,311.7	944.0	-375.9	1,016.1	0.00	0.00	0.00

Checked By:	Approved By:	Date:



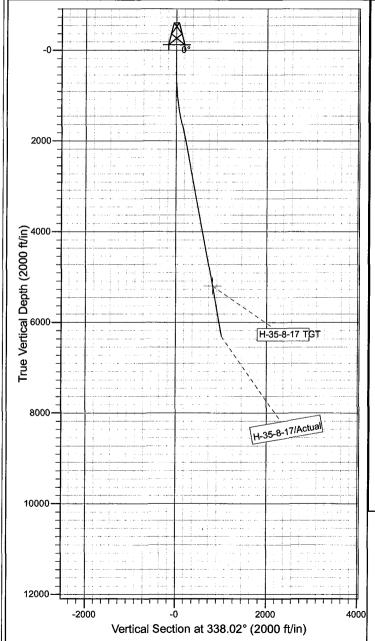
Project: USGS Myton SW (UT) Site: SECTION 35 T8, R17

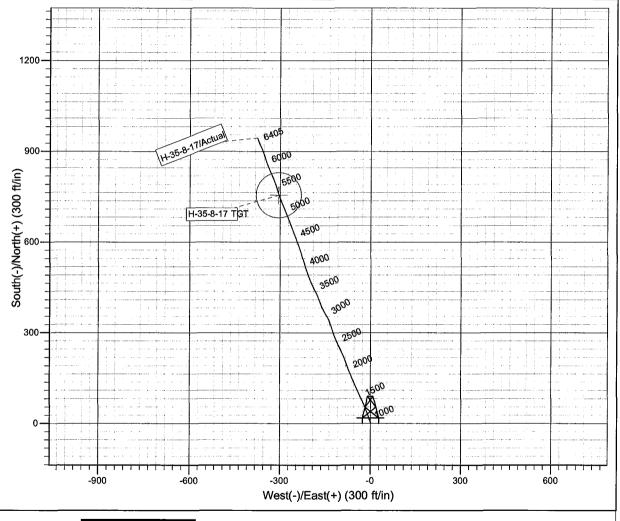
Well: H-35-8-17 Wellbore: Wellbore #1 Design: Actual



Azimuths to Grid North True North: -0.98° Magnetic North: 10.35°

Magnetic Field Strength: 52339.6snT Dip Angle: 65.85° Date: 2/3/2011 Model: IGRF2010





Design: Actual (H-35-8-17/Wellbore #1)

Created By: Sarah Webb

Date:

15:47, February 18 2012

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA